MODERN MUSIC AND MUSICIANS

III

MODERN MUSIC AND MUSICIANS

Philharmonic Edition

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GENERAL VIEW OF A MODERN ORCHESTRA

(The Theodore Thomas Orchestra of Chicago)

From a Photograph

MODERN MUSIC AND MUSICIANS

PART TWO: ENCYCLOPEDIA

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VOLUME THREE

The Theory of Music Piano Technique Special Articles
Modern Instruments Anecdotes of Musicians
Dictionary (Musical Terms and Biography)

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BEFORE THE IMPRESARIO

From the Painting by F. B. Doubek

THE THEORY OF MUSIC

THE THEORY OF MUSIC

MUSICAL FORM

CHAPTER I

NECESSITY FOR FORM IN MUSIC

Conformity in Variety—Monotony—Scientific Value of Musical Form—Plan of a Musical Work and Landscape Garden—Unfolding of Musical Faculty—Beethoven and Shakespeare—Thought and Emotion—Selection of Appropriate Form.

THE most ignorant and inattentive listener can hardly sit through the performance of an opera, an oratorio, or a symphony without noticing that the music occasionally changes from loud to soft and from slow to fast. A thousand details escape him altogether, and he would describe the music as tuneless. His first impression, then, would be an elementary idea of outline or form. Before he can get a clear idea of form, the many and varied themes or tunes must be familiar to his ear; he must not only recognize each tune as it appears, but he must also bear in mind the order in which the tunes appear, and the different keys in which they occur. This is difficult, for along with the perception of the particular often goes non-recognition of the general.

The form of a great temple is easily seen from a remote hill; but he who studies the details of a façade, column, and ornament, standing in the shadow of a lofty wall, must exert himself mentally if he wishes his imagination to build up for him a picture of the whole. Likewise, a study of the printed score of a great musical work will reveal details that even the practised ear of a musician can with difficulty hear.

If our most ignorant and inattentive listener becomes attentive, he will notice that all symphonies are more or less alike in their structure, however much they may differ in subject-matter and detail. He will not believe that this conformity of structure is purely accidental; nor can he think that the great as well as the lesser composers have merely followed the examples of their predecessors. Why this conformity in variety? Why not have a "Rondo" symphony of four or five or more rondos? Why not an "Adagio" symphony consisting of several slow movements? Because the result would be unbearably monotonous, and Horace long ago told us that a poem, designed to delight our minds, must sink to the bottom if it ever so little dips below the surface.

Composers make use of form in order to avoid monotony, and also for the sake of clearness. Form gives unity in variety. Unity without variety is monotonous; variety without unity is diffuse and vague. "When I was a boy," says Huxley, "I had abundant opportunities of hearing [the music of] that great old master, Sebastian Bach. I remember perfectly well the intense satisfaction and delight which I had in listening, by the hour together, to Bach's Fugues. It is a pleasure which remains with me, I am glad to think; but of late years I have tried to find out the why and the wherefore, and it has often occurred to me that the pleasure derived from musical compositions of this kind is essentially of the same nature as that which is derived from pursuits which are commonly regarded as purely intellectual. I mean, that the source of pleasure is exactly the same as in most of my problems in morphology—that you have the theme in one of the old master's works followed out in all its endless variations, always appearing and always reminding you of unity in variety."

That a high priest of science, as Huxley was, should so testify to the scientific value of musical form is enough to make one conclude that form is the chief source of interest in a musical work. That conclusion is erroneous. Form is the servant; ideas are the master. The function of form, the servant, is to help ideas, the master, to a better expression. It is quite possible that Huxley found more to interest him in the musical ideas expressed in Bach's fugue form than he imagined. It was form, however, which made the musical ideas clear to him. Omitting musical ideas, it is not difficult to construct a fugue more perfect in balance and symmetry of form than many of Bach's fugues are.

It is no more trouble to plan a musical work than a landscape garden. There is a path here, a row of trees there, a mass of shrubs in the foreground, and a hedge around the orchard—all conforming to a well-designed and balanced scheme. Considered as a design, and without atmospheric effects, our trees, paths, shrubs, and hedges are of no interest. You must see your park when the sun hangs a luminous saffron cloud behind the firs, when the long shadows of evening creep toward you, and the lanes lose themselves in dusky distance. Return to it when the summer stars sparkle above you and the moon "tips with silver all these fruit-tree tops"; wander through it in October when the leaves fall from the sapless branches—

"bare, ruined choirs where late the sweet birds sang"; visit it at Yuletide, when stalk and stem are veiled in hoarfrost and snow; come in springtime, after the warm rain of April has awakened the buds and blossoms from their winter sleep.

Are there not an indescribable beauty and a variety of beauty that are independent of the plan? Does the plan, in fact, add any charm to the landscape? It may or it may not; but if the eye could not take in a panorama, and had to get an impression as best it could through a narrow slit moving across the line of vision, only allowing a small section of the landscape to be seen at a time, it is certain that each picture would destroy the preceding picture, leaving nothing but a confusion of images on the mind, unless the designer had judiciously repeated at more or less regular intervals those pictures he wished the mind of the observer to retain.

Now, it is plainly impossible to get a bird's-eye view of a symphony as of a landscape or a cathedral. We only see a little of the tone-picture at a time. No sooner is one sound born than it dies into silence, making room for the next. And the necessity for design and balance is nowhere more imperative than in music, where all is so fleeting and impalpable—mere vibrations of the tympanic membrane.

Imagine the impression of chaos an hour of haphazard melody, endless harmonic changes, and varying rhythms would make on us. Now, Beethoven's Ninth symphony at its first performance lasted one hour and five minutes. Form and structural ingenuity alone shape such a vast conglomeration of sound into a musical whole. Without form, Beethoven's chords and phrases would no more resemble a symphony than a mound of stone, brick, and mortar could be called a cathedral. Herbert Spencer says:

"You have, perhaps, in the course of your life, had some musical culture; and can recall the stages through which you have passed. In early days a symphony was a mystery; and you were somewhat puzzled to find others applauding it. An unfolding of musical faculty that went on slowly through succeeding years brought some appreciation; and now these complex musical combinations which once gave you little or no pleasure give you more pleasure than any others. Remembering all this, you suspect that your indifference to certain still more involved musical combinations may arise from incapacity in you, and not from faults in them."

"Unfolding of musical faculty" means that the listener more and more understands the thought and feeling of the composer. This is a slow process which cannot be encompassed at a sitting by the study of an analytical programme. Any student, without an "unfolding of musical faculty," can clearly understand the form of a composition in a few hours; but Plato's assertion that there is a deeper harmony as there is a deeper astronomy—a harmony not for the ear—is as true to-day as it was twenty-four centuries ago.

Spencer has elsewhere pointed out that the chief function of the brain is feeling, not intellect; the greater the brain, the more feeling. It is the fashion to place that which is commonly called intellect on a higher plane than that which is commonly called feeling; but feeling, in the most comprehensive sense of the word, has always reigned supreme. No change of dynasty can take place till human nature is other than it is. Students of music often get no farther than the form, which has been invented, instead of seeking first variety and contrast of those emotions which have been the birthright of the human heart since time immemorial. It is wrong to approach a work of art in the spirit of an anatomist about to dissect.

Morphology, the science of forms in organisms, is of little value in the study of music, compared with physiology, the important science of the function of these forms. It is worse than useless to emulate Jedediah Buxton, the prodigious calculator, who died in 1772. He was seen to be deeply interested in a performance of "Richard III"; but when asked for an opinion on the play, he replied by giving the number of words that Garrick, acting in it, had spoken. Shakespeare himself could not have done that! Neither could Beethoven have told the number of bars in any of his symphonies; nor the number of bars in any one movement; nor the number of bars in any division or in any theme in the movement. The composer's only care is that the transition from one emotion to another shall be natural and in a manner most likely to awaken the same emotions in the hearer.

Now, as all thought takes its rise in the emotions, it follows that that which stirs the emotions must stimulate the thought-centers, and the mingled emotions and thoughts which music quickens will differ in each hearer in so much as his intellect and temperament differ from those of the composer. As the proportionate amount of intellect and feeling varies in every composer, it is not surprising that forms are continually changing. Certain forms having arisen, they develop, mature, and decay; while new forms take their places. On the other hand, hope, longing, awe, fear, dread, devotion, anger, hate, scorn, love, tenderness, pity, surprise, amazement, content, gaiety, mirth are at least as old as humanity—the same through all generations.

The value of a musical work is not in its form; but the value of a musical work is enormously enhanced by the selection on the part of the composer of that form best adapted to the clear and forcible expression of the ideas contained in the work.

Each composer goes his own way—a sailor on the restless tide of passion. They all learn navigation; and one sails west, another to the Orient; one explores the legendary seas of the silent North, another basks in the sunny South; but they all—the fantastic and the somber, the tragic and the gay—fashion their works on some model of form.

CHAPTER II

CLASSES, CHARACTERS, AND KINDS OF MUSIC

Identity of Class in Sacred and Secular Tunes—Distinction of Character—Necessity for Musical Forms—Homophonic and Polyphonic Composition—Sacred and Secular Characters—Vocal, Instrumental, and Accompanied Vocal Music—Examples.

IF we examine several hymn-tunes, we shall find that, while each may be completely and distinctly different from the others in key, melody, harmony, rhythm and general effect, nevertheless there is still something about them which entitles them to be considered as belonging to the same class—something showing that each and all of them were intended for the same common purpose. This conclusion would be arrived at from the broad and dignified character of the music, from its clear and striking divisions into portions of a certain length, and from the well-marked and strong cadences employed. This *something* is simply the structural design or plan of the music.

If, again, we look at a number of national airs, we shall find that here also, although, as we may say, the tunes are as different from each other as night is from day, yet there is something in their general design which distinguishes them as belonging to the same class; while the scope of the melody, its ornamentation, and its peculiarity of rhythm, combined with its secular or sensuous feeling, make it almost impossible to confound such music with that of the hymn-tune order—their *characters* being totally different.

We have selected these two varieties of musical composition because they are the simplest and the best known of sacred and secular tune; at the same time it may be pointed out that the distinction between them is not always so striking as in music of a more elaborate type. It would be rather premature to introduce examples of an advanced or complex nature here; and so, without diverging much from the path of simplicity and popularity, let us say that, in listening to an anthem having a free organ accompaniment (not consisting of the voice parts only, but having an independent design of its own), one would not require much musical education to perceive that it was not a hymn-tune that was being sung; while an Anglican chant could never be mistaken for either the one or the other of the two former. The hurried recitation of the chant, the rhythmical progression of the hymn-tune, and the varied configurations of the anthem all indicate unmistakably that they are not all of one kind, but are constructed on entirely different plans. There are, therefore, various orders of musical compositions, exhibiting different structural ideas or designs, which go under the name of musical forms.

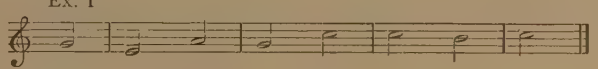
This is not the place for lengthened argument as to real necessity for specific forms in musical art. Such forms, however, do exist and are largely employed as concrete wholes, according to the recognized principles of structural composition. It is quite true that a great deal of music is fashioned after no definite form; indeed, in many cases it is entirely without form. Nevertheless musical forms of certain recognized types (which have served their cause so well, by giving to music strength and stability, meaning and purpose) must still continue—otherwise the art must shrivel into puerility and inanity.

In its structural design music may be divided into two classes, namely, homophonic and polyphonic. Homophonic composition is that which contains but one principal part. There may be several parts employed in the composition, but one is distinctly predominant beyond the others, either by reason of its striking individuality of construction, or because of the supreme beauty of its melody. The word homophonic literally means likeness of sound, or sameness of sound; and in the present case it doubtless applies to the sameness, or want of variety, in a composition containing but one principal part, compared with the rich and interesting contrast that exists in a piece where a number of parts are employed in unfolding and developing the musical idea.

Polyphonic composition is that in which there are several parts, all of equal importance, and all being recognizable portions of the particular design adopted by the composer—all having a responsible share in working out the plan of the composition. The word polyphonic means having many sounds; and its application to a composition with a number of real parts will be perfectly intelligible.

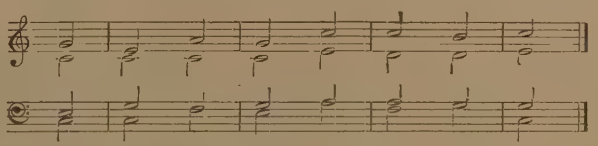
The following (Ex. I) is a line of a well-known hymn-tune:

Ex. I



The above (Ex. I) is a monophonic example. It is a single part, possessing sufficient merit to be considered complete in itself. We might enhance its effect, however, by means of harmony supplied by other voices, as in Ex. II; when it would become homophonic—it would still contain but one principal part.

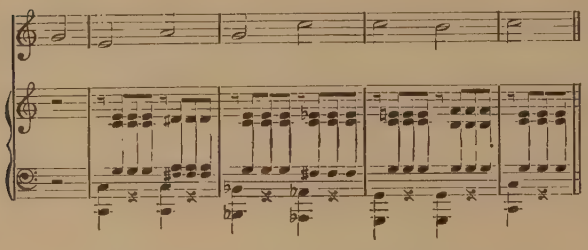
Ex. II



Here (Ex. II) the treble is still the principal part—the part by which the music may be recognized: the other parts are mere auxiliaries, and could not be separately and independently employed as the treble part can. Again, if we treat the melody to an instru-

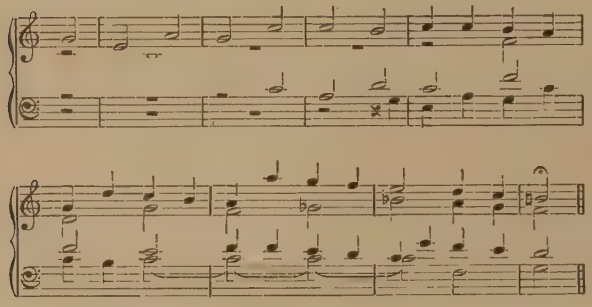
mental accompaniment, as at Ex. III, we still have the one predominant part, which, were it taken away, would leave nothing but a mechanical and meaningless jingle. This example is also homophonic.

Ex. III



If, however, the music be arranged in such a manner as to make each part employed essentially requisite, and all the parts equally responsible for the completion of the musical effect, then it becomes polyphonic, as in Ex. IV.

Ex. IV



It is not difficult to discriminate between the two classes of music spoken of, so long as their respective features are clearly defined. It often happens, however, that the homophonic and the polyphonic come into collision and get entangled with each other, as in cases of the following description: songs with pianoforte accompaniment and violin obbligato; duets in which the voices sing together only at intervals; modern hymn-tunes in which sometimes one part and sometimes another has a struggle for temporary supremacy; national or popular airs harmonized for vocal and instrumental use in which the treble part often takes a subordinate position for a time, while some of the other parts become prominent, and where, by fugal treatment, consequence is given to the different parts; songs of slender construction with elaborate accompaniments. These and other cases render it difficult, and sometimes impossible, to say to which of the classes mentioned the music belongs. We have still a very convenient alternative left, however, which will get us over the difficulty—all music may be classed as homophonic, polyphonic, or mixed. This latter classification must only be adopted after careful deliberation.

Musical compositions are further characterized as sacred and secular. At the present day, or at least according to the evidence of modern music, it might be difficult to prove that these two characters really exist as separate and essential features of musical composition; for, however great the line of demarcation between the two may have been in the past, there can be no question as to the mixing and the overlapping of the sacred and the secular at the present day.

In one sense it is true that there is secular music to be found in sacred places, and sacred music in secular places. Sir Arthur Seymour Sullivan's tune to "Onward, Christian Soldiers" is not a bit more sacred than General Reid's "Garb of Old Gaul"; and the popular tune to "We Plough the Fields and Scatter" may reasonably be considered to be quite as secular in its character as "The Men of Harlech" or "God Bless the Prince of Wales." But yet all music that is really good, and which must consequently have a purifying influence, is emphatically sacred music. The real application of the terms sacred and secular will therefore very largely, if not entirely, depend upon whether the music be used for sacred or secular purposes, or in connection with sacred and secular subjects.

Independently of class and character, musical composition may still be arranged into different kinds—vocal music, instrumental music, and accompanied vocal music. Vocal music is written for voices only, and is arranged in such a manner as to produce an effect of completeness and fullness without any instrumental assistance being required. Pure vocal music is not intended to be accompanied; and although, sometimes as a matter of convenience, and sometimes from entirely mistaken motives, instrumental assistance is introduced, yet the practice is to be deprecated—it is seldom beneficial, and very often detrimental to the musical effect. Instrumental music is written for and performed by musical instruments only. Accompanied vocal music may be said to include in a general way all music that is intended for performance by voices and instruments together. Of course this rather places the instrumental portion of the music in a subordinate position; whereas, in many instances, especially in modern works, this is not the case. The very reverse is sometimes found.

CHAPTER III

MUSICAL FORMS IN GENERAL

How Musical Forms are Made and How Distinguished—Sameness and Difference—Varieties of Subject, etc.—Examples.

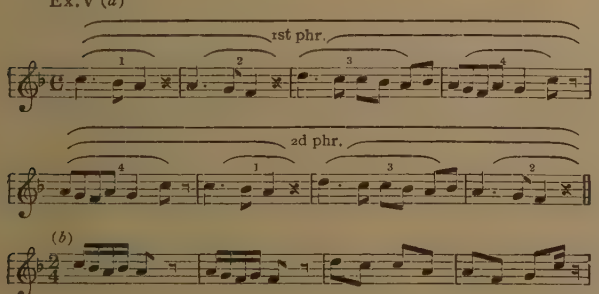
WE now come to the more direct object of the present study; namely, musical forms considered as complete and distinct specimens of the various designs or plans employed in musical compositions according to their class, their character, and their kind.

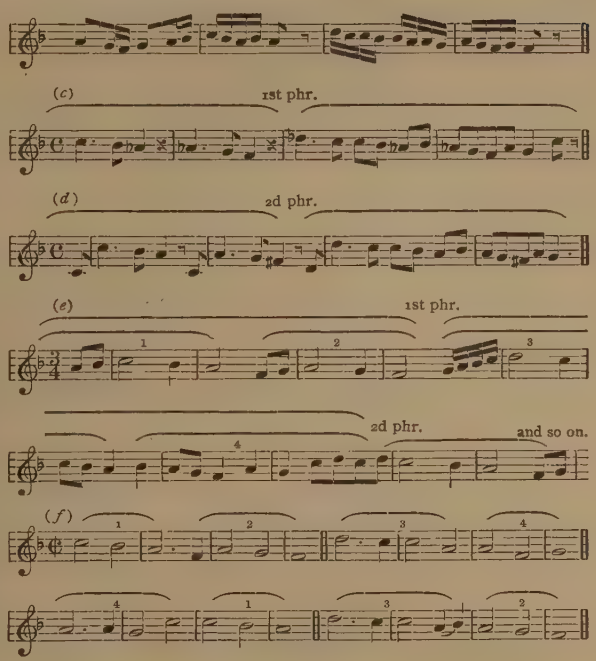
Musical forms are pieced together, so to speak, in many different ways, and it is the order in which this piecing is accomplished, and not the nature of the pieces themselves, that causes one form to differ from another. The elements or ingredients employed, then, are much the same, in their simple nature, in all musical form; and it is only when they come to be compounded that the difference arises. The various pieces just referred to go under certain names, such as figures, phrases, sections, periods, subjects, etc.; all being more or less important, and bearing a certain relationship to each other. It is not our purpose here to describe in detail the different pieces mentioned, nor to explain their individual constitution and their relationship, but to treat and illustrate each musical form as a whole, and to show, as simply as we can, what constitutes the essential difference between one form and another.

All musical forms have their origin from the same source—from those simple ingredients already mentioned; and so the student will find that in dealing with different forms he is dealing pretty much with the same materials. He will have to observe carefully, then, in what respects they are the same, and also in what respects they are different.

The following illustrations (Ex. V) are intended to show how a few simple pieces may be united so as to form a more extended portion of the music; and also how those small pieces, by some alteration in their progression, or by some other modification, change their relationship and their influence; so that, while they individually retain their identity, yet the whole passage that comprises them assumes a totally different aspect.

Ex. V (*a*)





In the foregoing (Ex. V) at *a*, we have a subject, consisting of eight measures, and divided into two phrases. These phrases are divided into two semiphrases; and these are again divided into figures. We may remark in passing that subjects are not always divisible in such simple and regular order. We wish, however, to make our purpose plain, and we have therefore adopted a simple example. It will be observed that the figures are the smallest pieces of division. It will further be noticed that the same four figures used in the first phrase are used again in the second section in a different order. The result of this rearrangement of the figures is to change the effect and the purpose of the two phrases. The melodies of these two phrases are appreciably distinct from each other; and the cadences form in the first phrase what is called a half close, and in the second phrase a full close.

At *b* the whole subject given at *a* is, by means of a slight rhythmical alteration in the figures, made to assume a new character. Here again, then, is difference and sameness; and the elements of both are plainly discernible.

At *c* a change of mode is effected, by means of accidentals, from F major to F minor. The figures and semiphrases, however, remain exactly the same in their shape and their order as before.

At *d* a modulation to another key (G minor) takes

place, and an introductory note is added to the figures. In other respects the matter is the same as at *a*.

At *e* the time is changed, and the figures are lengthened to two measures; there are also guides or bridges employed—these are the quaver notes leading to and connecting the figures. A considerable change has taken place here on the general nature of the whole section; but there is no difficulty in discovering where the sameness exists.

At *f* a radical change is effected. The whole subject is converted into a hymn-tune; but the lineaments of the music as originally given at *a* are perfectly recognizable.

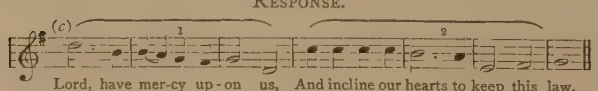
It must not be supposed that we have exhausted the varieties of subject which might be obtained from the four simple figures in the first section, at *a*. Space will not permit more examples than those we have given; but the varieties are practically exhaustless. This will be obvious, if it be considered that, from four figures, twenty-six different semiphrases may be arranged. This would afford material for about two hundred and seventy different subjects. Then there are the variations of rhythm, which would only be limited by one's power of invention, not to mention the many other means which may be taken—some of which we have shown—to change the general disposition of the subject, without destroying or defacing its constituent elements. Just as this is the case with the smaller pieces—the figures and the phrases—so is it with the larger portions of the music.

And thus we find that the subjects and the periods are arranged, combined, repeated, interchanged, interwoven, and overlapped, brought into different relationships of key, and mode, and interval, subjected to rhythmical variation, and melodic embellishment, lengthened, curtailed, and otherwise modified, so as to produce the complete movement required for this or that particular musical form. Ex. VI gives a few simple illustrations of the varied treatment which a given subject may undergo in respect of the particular forms for which it may be employed.

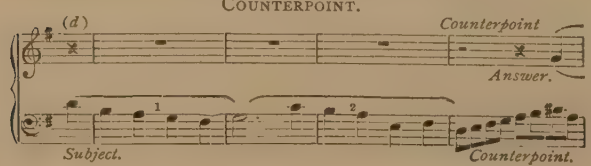
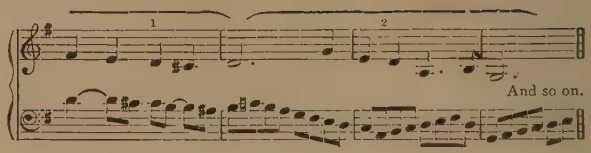
Ex. VI First Half of Double Chant.

First Half of a Hymn-Tune.—S. M.

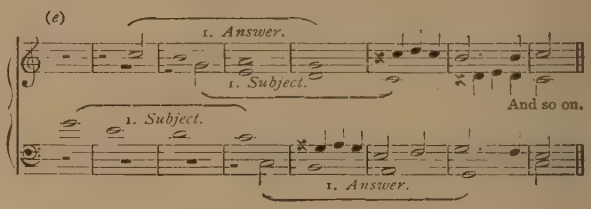
Response.



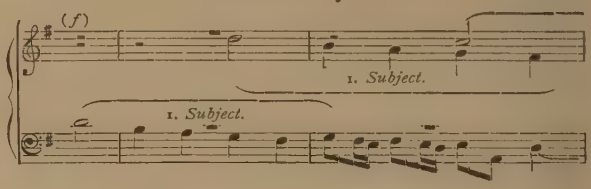
Exposition of a Fugue—Subject and Answer with Counterpoint.

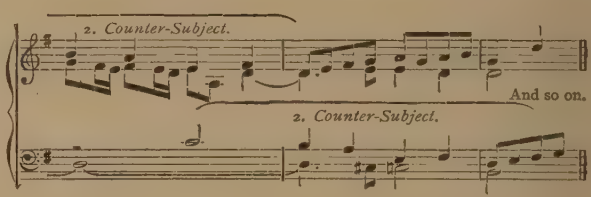


Stretto of a Fugue.

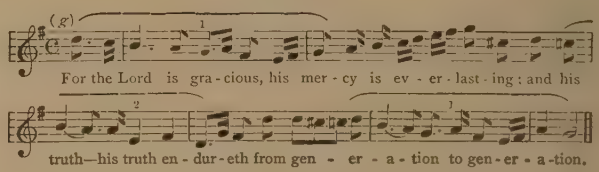


Stretto of a Fugue with Subject and Counter-Subject.

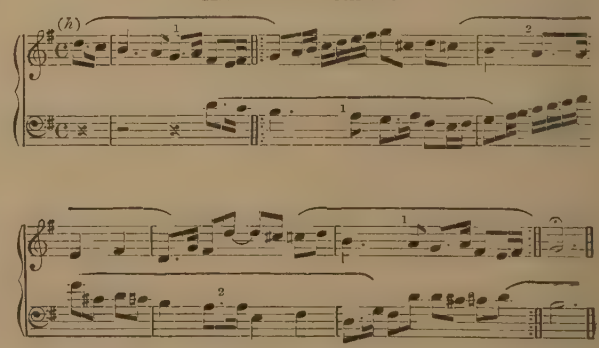


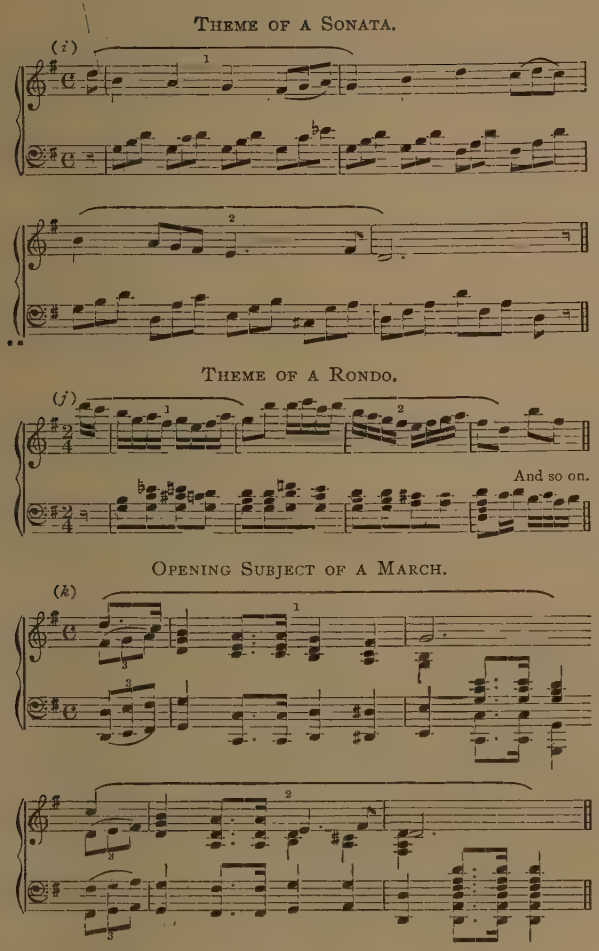


Sacred Solo.



An Endless Canon.





These illustrations (Ex. VI) are all portions of various musical forms which will be found to be fully explained in the proper place. Here we have only to point out that in the examples before us there is a most obvious and conspicuous difference, yet in every case the same subject is used with unmistakable distinctness.

At *a* the subject is shown as the first half of a double chant, ending with a half close. It will be noticed that the two sections, while both having an equal number of notes, are not alike in actual length.

At *b*, to suit the measure of the hymn, the two sections are necessarily made equal.

At *c* there is a breaking up of some of the notes to meet the requirements of the words; and (this being a complete sentence) the second section is made to finish with a full close.

At *d* the length of the notes—the time—has undergone some change, but the tune remains substantially the same. The two sections comprise what is called the subject of the fugue; and their repetition in the key of the dominant (which takes place at the fifth measure) constitutes what is called the answer. The answer may require a slight modification of the subject that precedes it, which it does here.

At *e* the first section of the original example only is taken, and even that is a little curtailed. Here the answer looks more like the second section of the original example; but it is not intended as such—it is the first section having its first interval altered from a third to a second, which is sometimes necessary in the answer.

At *f* we have both of the original sections introduced, each being worked in double.

At *g* the subject is considerably elaborated by melodic embellishment; and at *h* this ornamental arrangement is employed in canonic fashion. The student will easily make out the original sections, notwithstanding their heavy decoration.

At *i* the same subject appears as the theme of a sonata; at *j* as a rondo theme; and at *k* it is treated in march fashion.

By careful examination of these examples the student will see that, while in every case the difference is broadly apparent, yet the element of sameness is by no means difficult of apprehension.

Experience has taught that in the vast majority of cases young students have much less difficulty in discovering the difference in two pieces of music than in perceiving the sameness that may be found in them. Indeed the similarity that often exists among the figures and the phrases is seldom perceived unless it be made glaringly prominent.

Let the student, then, seek to cultivate perception of similarity, which, for this branch of the subject at least, is of supreme importance. In this way he will be enabled to trace elements having sameness, under every sort of modification, through all the labyrinth of tangled rhythm and figurated melody, through all the complications of key-changes and the ramifications of the various constitutional methods so frequently referred to here.

We have seen, by examples just given, that things which are essentially different may yet contain a strong element of similarity. Without a clear perception of this often half-hidden element, the student can never thoroughly appreciate the intrinsic beauty of the higher musical forms.

CHAPTER IV

SIMPLE SACRED AND SECULAR FORMS

Amen—Chant—Versicles and Responses—Psalm-tune—Hymn-tune—Song—Duet—Trio—Quartet—Recitative—Air, or Aria—Chorus—Examples.

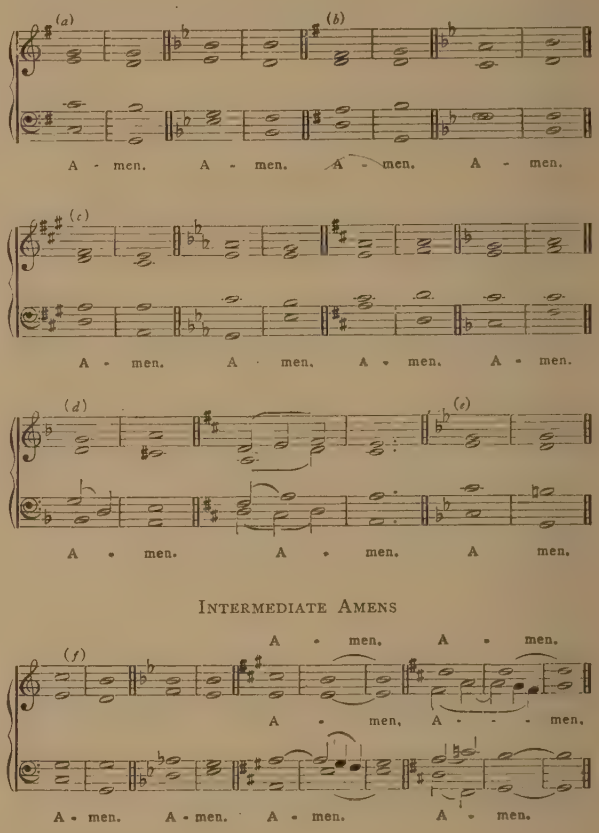
Amen

TO claim for the Amen a place among definite musical forms may appear to be descending to triviality. Be this as it may, the Amen either has an individuality of form or it has not. If it has not, then it has no real and recognizable existence. But we know that it has such an existence, we are familiar with its effect, we perceive its object, and we can describe its constitution; so, it is really a something—it has an existence of its own. At first sight it may appear that the Amen is only useful as a kind of coda, a sort of not altogether necessary appendage to what has preceded it; nevertheless, it is frequently used by itself after spoken sentences, and there it stands as a solitary musical passage. In this way it assumes a complete musical form, of independent existence and recognizable nature.

The Amen is a mere cadence. In its most popular treatment it consists of but two chords, those of the subdominant and tonic (Ex. VII-*a*). This progression is called a plagal cadence; and it is the favorite device for the Amen, beyond all others, because of its peculiarly solemn and soothing character. Another somewhat common progression for the Amen is what is called the authentic cadence (Ex. VII-*b*). These are both called perfect cadences, and are usually employed as final Amens—that is, after the last of a series of prayers, or at the end of a hymn. Less complete varieties of the perfect cadences are occasionally employed as final Amens with more or less complete effects (Ex. VII-*c*). Even an imperfect cadence is sometimes to be met with as a final Amen, especially in the minor mode (Ex. VII-*d*). In the minor it is not uncommon for the tierce de picardie* to be used in the Amen (Ex. VII-*e*). Elsewhere than as final Amens, imperfect cadences are often employed, as, for instance, for the sake of variety, after prayers other than the last of a series, and also at the end of anthems or choruses that finish with an amen repeated two or three times (Ex. VII-*f*).

In numerous cases, of course, the word Amen is frequently made use of as a peg to hang a deal of music on, so to speak; and in finishing the Gloria Patri of a service,† or at the conclusion of an anthem, it may occupy many measures. The word Amen has been used as the sole verbal theme of very extensive movements, receiving elaborate canonic and fugal treatment, as in Handel's Amen Chorus. All such examples, however, must be considered according to their own special merits, and cannot be included in the present classification. The Amen, as a distinguishable form, is simply a cadence and nothing more.

Ex. VII



Intermediate Amens

Chant

The Chant is more or less a combination of measured and unmeasured music: that is to say, while one portion of it must be performed in a certain rhythmical order, another portion is sung without any fixed succession or relation of accent, and is altogether rhythmless.

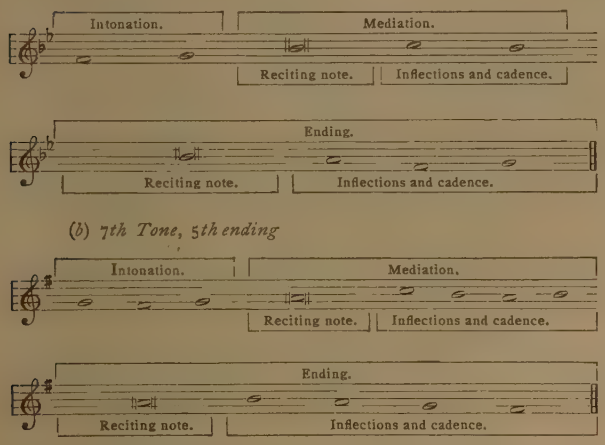
The Gregorian chant is almost entirely without rhythm. If it does possess any rhythmic feeling, it is so vague and so variable that the Gregorian chant might, without much injustice, be said to be altogether lacking in fixed form. Still it has parts or pieces, each having its own purpose, and all occupying distinct relative positions in the chant. The Gregorian chants, called tones,‡ are eight in number; and each tone has

* Finishing with the tonic chord having a major instead of a minor third.
† A canticle of the Episcopal Church with an elaborate musical setting.
‡ The word tone as used here must not be confounded with tone, an interval. It must be held to mean simply a mode or tune.

several endings, making in all twenty-six chants, all differing from each other, not only in regard to the character of their melody, but also in respect of their length. The only thing of a formal kind by which similarity may be recognized in the different chants is the relative positions of their several pieces already referred to. In Ex. VIII two Gregorian chants are given. At the time when this kind of music was in its glory, previous to the Reformation, musical notation was very different from what it is now. It was written on a staff of four lines. Sharps and flats were not employed (excepting an occasional B♭). The notes were—a square black note with a stem at one side; a square black note without a stem; and a diamond-shaped black note. These were the long, the medium, and the short notes in use. There were no bar lines employed. In some churches of certain denominations, where ancient Church tunes are held in high esteem and reverence, the Gregorian tones noted in the old manner are in constant use at the present day. But as comparatively few could be expected to be familiar with that antiquated method of notation, we have given the illustration (Ex. VIII) in modern characters.

Ex. VIII

(*a*) *2d Tone*



(*b*) *7th Tone, 5th ending*

From the above (Ex. VIII), it will be seen that the Gregorian chant consists of three principal pieces —the intonation, the mediation, and the ending. Both of the latter two pieces contain a reciting note and inflected* notes, and end with a cadence. We see, however, that as the three characteristic pieces vary considerably in different chants, there cannot possibly be any fixed rhythmical proportion in music of this description. The absence of bar lines may cause some doubt as to where the accent should fall, or as to whether there be any accent at all. There is accent in Gregorian chants, but of a very irregular character, and depending very much upon the words to which the music is sung. In passing from one part of the chant to another there is always an accent. For example, in passing from the intonation there is an accent on the first syllable of the reciting note: any number of syllables may be sung to this note, according to the length of the verse; and in passing to the first inflected note there is another accent. The inflected notes themselves are accented according to their number, and as the words may demand.

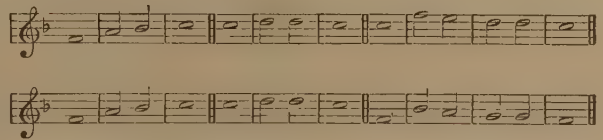
* Inflected simply means rising or falling, in contradistinction to the reciting note which stands still on the one degree of the staff.

We now come to the more commonly known Anglican chant. For a considerable time before the Anglican chant, in its present fixed form, came to be established, there had been a gradual molding and modifying of some of the Gregorian tones into a more modern and fixed form. It might be safe to say that the Anglican chant came into use with the Reformation. It did not, however, supersede the Gregorian chant for some time after the period—if indeed it can be said to have done so entirely yet. At all events, Anglican chants, or, to be more precise, the Anglican chant form, is now much more extensively employed than the Gregorian, and probably has been for the last two hundred years at least. Its popularity is not to be wondered at, seeing that it is more melodious and pleasing to the ordinary ear than its predecessor, while its fixed and unchanging form makes it much more readily appreciated, and renders it more suitable for congregational purposes. Of course, admirers of the Gregorian tones hold the very reverse to be the case; and, from their point of view, we are not disposed to quarrel with them. But admirers of the Gregorian tones are comparatively few, so that the Anglican chant is of the greater benefit to the larger number.

The Anglican chant is of two ordinary kinds—the single chant and the double chant; the only difference between them is that a double chant is just like two single chants joined in succession. A single chant is sung to one verse of the Psalms; a double chant takes in two verses. Quadruple chants have even occasionally been tried (these, of course, will include four successive verses); but their length is apt to lead to some confusion: at all events, they are not popular.

It has been supposed that the Anglican chant took its form from the old common-measure psalm-tune, which, unlike our common meter of to-day, consisted of two short lines of fours, one of six, two of fours, and one of six, with a long note at the beginning and the end of each line, thus (Ex. IX):

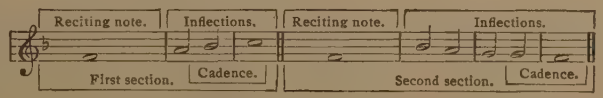
Ex. IX



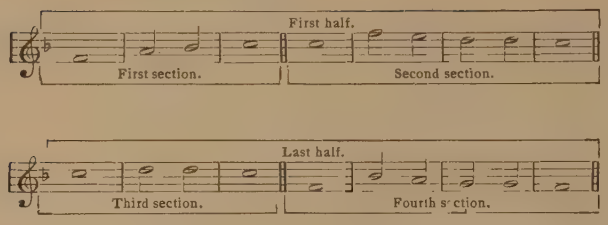
Here, then, is a tune of six sections, of which, if we take the first and the last, we have a single chant (Ex. X-*a*); or, taking any two short sections, and the two long sections, we have a double chant (Ex. X-*b*).

Ex. X

(*a*) *Anglican chant, single*



(*b*) *Anglican chant, double*



Each section of the chant corresponds to half a verse of the psalm. Each section begins with a reciting note and ends with a cadence. To the reciting note so many syllables are monotoned* from one up to any number, according to the length of the half-verse. Speaking roughly, the last three syllables in the first half of the verse, and the last five in the second half, are left for the inflected notes. Frequently, however, an alteration of this arrangement is required, according to the sense and the expression of the words.

It will be easily observed that the sections of the chant are not equal—one contains three measures and the next four. There is thus apparently a want of balance, which it might be thought would displease the ear. But in listening to a chant there is no effect of lopsidedness experienced—the balance of the sections seems to be quite perfect. This may be owing to the influence of the reciting notes, which, by their being lengthened indefinitely and irregularly, throw the ear out of calculation; or it may be that the one reciting note running into the other deceives the listener, who mentally ekes out the short section with a note from the long one; and that equal balancing of the pieces in a composition for which the mind always craves is attained.

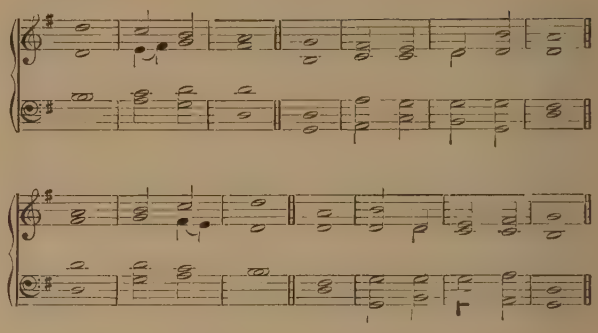
The chief points of similarity between the Gregorian and the Anglican chant are: first (and most distinctly), the reciting note; secondly, the inflections, which, however, have not fixed succession in the former, while in the latter they have.

There are other modern chant forms to be met with; namely, what are sometimes called metrical chants. The most familiar of these is, perhaps, Troyte's chant, frequently sung to the hymn "Abide with me." But metrical chanting is something of a misnomer, or a paradox. Chanting must contain some element of unmeasured recitation—this is its characteristic feature. In singing a chant to metrical words in which all the verses are alike, there must be pretty much the same recurring measurement in every verse; so that the varied recitation, for which a chant is specially intended, cannot take place. A metrical chant then is simply a peculiar form of psalm-tune.

Many Anglican chants display much originality of invention. In this respect the famous double chant of Dr. Crotch claims precedence (see Ex. XI). The music in the two sections of the first half of this chant is repeated backward, note for note in all the parts, in the corresponding sections of the last half. This style of composition is termed *per recte et retro,* which simply means that it may be taken through the right way or backward.

* Sung on one sound, or one tone.

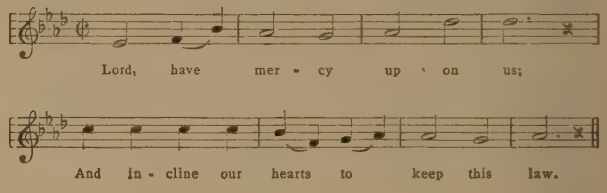
Ex. XI



VERSICLES AND RESPONSES

These are sentences of various lengths occurring at certain parts of the Church Liturgy. They may be set either in a semichanting style, or in a more ornamental and measured form. The oldest, and perhaps the best for their purpose, are of the former kind. Among the more modern are to be found adaptations from larger works, such as the following, from Mendelssohn's "Elijah" (Ex. XII):

Ex. XII.

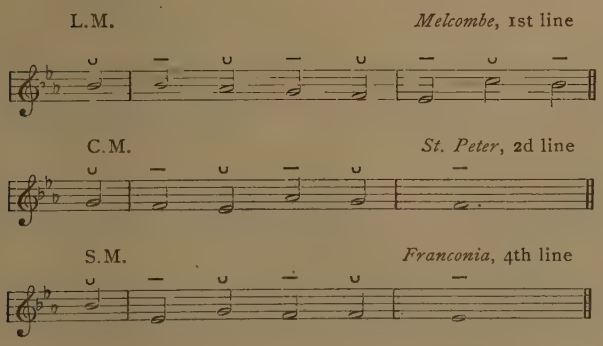
RESPONSE AFTER THE COMMANDMENTS—CHURCH OF ENGLAND SERVICE

PSALM-TUNE

The psalm-tune may really be said to have originated with the Reformation. Of course there were tunes of a somewhat similar kind in use long before that, but they were, as a rule, of a Gregorian character, whereas the psalm-tune is of a more modern tonality, and more popular in its nature. It is beyond every other form of music the simplest, and therefore the most congregational—for which use it was specially intended. This arises from three causes: (1) the slowness of its movement; (2) its syllabic progression; (3) the regular measurement of its phrases, which correspond to the four lines of a metrical psalm.

The psalm-tune is generally written in half-note time —$\frac{3}{2}$ or $\frac{4}{2}$. Several years ago $\frac{2}{2}$ was largely used, but this in most cases has now been discarded. As the psalm-tune is intended to be sung slowly, and by large masses of the people, it can scarcely be said to have any particular rhythm in its performance, as the slow and ponderous delivery of each note is apt to make the accents appear to be all of one kind. Further, the syllabic nature of the music rather tends to destroy the accent, especially when the speed is slow. Of course, in tunes written in triple time an occasional syllable has two notes sung to it; and here, perhaps, there is a

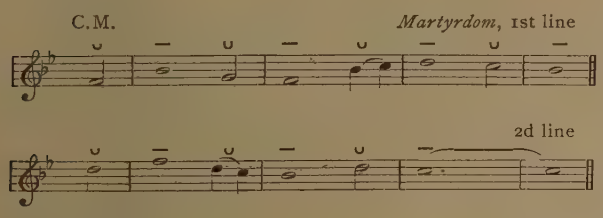
stronger rhythmic feeling than elsewhere. There are three principal meters or measures in psalm-tune music —long meter, common meter, and short meter. In long-meter tunes there are eight pulses in every phrase, corresponding to the eight syllables in every line of words. In common-meter tunes there are eight pulses in the first and third phrases and six in the second and fourth. In short-meter tunes there are six pulses in the first, second, and fourth phrases, and eight in the third. But whether the meter be long, common, or short, the musical phrases in every line of all the three varieties are mostly the same in length. This is necessary for the sake of rhythmical balance, and is accomplished by finishing the short phrases by means of longer notes, as the following selected from the three different meters will show (Ex. XIII):

Ex. XIII



When the psalm-tune is written in triple time, the lengthening of the short phrases never appears in the music; so that really the rhythm seems to want balance. In a triple-rhythm common-meter tune the second line would require to be lengthened as here shown (so would the fourth, of course), Ex. XIV:

Ex. XIV



But this, if the tune were sung slowly, might be considered to be too long; if it were performed quickly, it would be found to be all right. Be this as it may, there is always, or should be, a pause made at the end of the second and fourth phrases of a triple-measure psalm-tune. The harmonies of the psalm-tune are usually simple, and generally diatonic. Modulation, particularly to the dominant key, is much employed, but chromatic accidentals almost never in this kind of composition.

Chorale is the name given to the psalm-tune form in Germany; and many of our best tunes are from German sources.

Hymn-tune

This might almost be included under the previous heading, but seeing that modern hymn-tunes differ considerably in their style from our sixteenth-century psalm-tunes, a special word is due to this rather more elaborate form of simple music. The modern hymn-tune, we might almost say (if there is to be any distinction drawn between sacred and secular music), is less sacred in its character than its predecessor. The hymn-tune is more ornamental, being seldom syllabic, and its harmonies are of a more sensational kind. Remote modulations and chromatic harmony are freely and often effectively employed in the hymn-tune. The kinds of meter to be met with are of every conceivable variety. As a general rule, however, the phrases are of a uniform length, according to their kind. At the same time, several notable exceptions to this rule are to be met with. Many of our hymn-tunes display much musical skill, and afford scope for artistic performance. A list of hymn-tune writers would embrace the names of the foremost composers of the present day and of recent times.

Song

The song is a single melody for poetical verses, and intended to be sung with or without accompaniment. The song is the most popular of all musical forms. In its simplest state it contains a strong element of sameness among its phrases, and its rhythm is regular and clearly defined. Thus a simple song form is quickly learned and easily remembered. National songs illustrate this in a more marked degree than the productions of a scholastic age, and of advanced musical thought. The song form should contain an independent beauty of its own, without absolutely requiring the aid of instrumental accompaniment. It should also be in strict sympathy with the words for which it is written, presenting a general impression of the whole sentiment of the poetry, rather than giving prominence to any outstanding feature. The production of a song depends more upon pure melodic feeling and true poetic appreciation than upon the comprehension and application of abstruse musical principles. A good song need not present any technical difficulty, and many that have been long cherished, and still live to be admired (while others more artistically contrived have passed away), were written by men who occupied but humble places in the scale of musical greatness.

Properly speaking, the song form should be repeated entire to a number of different verses. In past times this was the case, but in our modern songs this simple arrangement seems no longer to be adhered to. Whether it be that all the attractiveness and beauty of melody *as* melody have been used up, and composers are now forced to introduce some peculiar and novel devices instead, we do not here say. Neither are we saying anything against this modern song form, as music. We are simply stating a fact; namely, that the song form of the past contained only a few simple phrases, but they were, and are still found to be, sufficient to attract and captivate the listener; whereas

the song form of the present day seems to contain much that will hardly bear repetition, because in our modern songs we are treated to a succession of changing and strongly contrasted effects (often produced by the accompaniment, while the vocal part is a mere nonentity), somewhat analogous to a series of dissolving views, each obliterating the impression of the other.

Duet

The duet is intended to be sung by two single voices. It may take the simple song form, and be sung throughout in two parts; or one voice may sing a portion and the other follow with another portion; at other times both voices may sing the same part. All these three methods may be used in any kind of duet, no matter whether it be simple or ornate, but none may be used continuously from beginning to end except the first.

Trio

The trio is intended to be sung by three single voices. Male-voice trios were very popular with English glee-writers at the end of the eighteenth century and the beginning of the nineteenth. At the present day trios for female voices are more common. These, however, are in many cases wrongly named—when intended for class use, they should be called three-part songs.

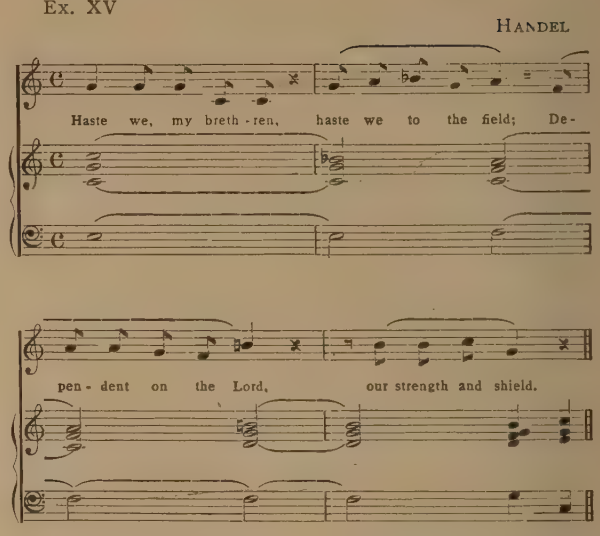
Quartet

The quartet is usually written for four single voices. Sometimes a double quartet is met with, as in Mendelssohn's "For he shall give his angels," in "Elijah." A quartet in which each of the parts is sung by two voices to strengthen the music is sometimes called a double quartet; but it is wrong to name it so.

Recitative

This is a kind of musical declamation. It is an attempt, as far as possible, to imitate spoken words by means of musical sounds. Although this cannot be exactly done, still there is in recitative a musical effect produced which we cannot call melody, as it wants melodic connection, both as regards its tone-succession and rhythmic construction. The short jerky figures of which recitative is made up are of a very conventional character. These figures have become common property; indeed, they have been appropriated as such, almost since recitative was first used, more than three hundred years ago. Nothing in music has changed its form, perhaps, so little as recitative. This proves the fitness of the material adopted to the purposes for which it was first selected. If we examine a few recitatives of different composers we may be struck—if we have not before observed it—not only with the similarity of the music, but with the absolute identity of many of the figures. Here is an example from Handel's "Judas Maccabæus" which contains, out of four figures, three that are exceedingly common:

Ex. XV



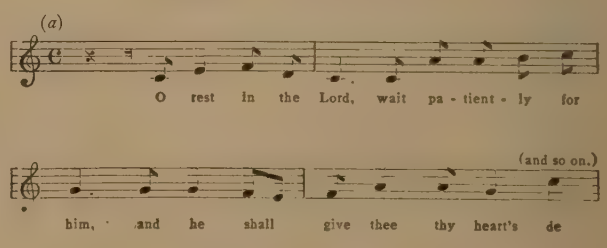
The figures referred to are marked off in the above by means of curved lines, and, note for note, they may be easily found in other works of a similar nature. The accompaniment to the recitative is so designed as to allow the singer a deal of liberty in the performance of the music. The length of the notes need not be rigidly adhered to, and the pitch may in some cases even be altered, so long as an expressive rendering be given to the passage.

Air, or Aria

This form is a melody or solo occurring in a high-class work, such as an oratorio or an opera, and is always intended to be sung by the particular kind of voice for which it is written. The aria is frequently found to consist of a principal theme, a secondary theme, and a da capo—finishing with the principal theme. Numerous examples of this form are to be found. Sometimes the words da capo are used after the second theme, and the principal theme is sung over again just as at first. We also find, in some cases, that the principal theme appears again, after the second theme, in a slightly altered form. Of the former of these methods, Handel's works supply a large number of illustrations; of the second method, Mendelssohn's aria "O rest in the Lord" affords a good example. (See Ex. XVI.)

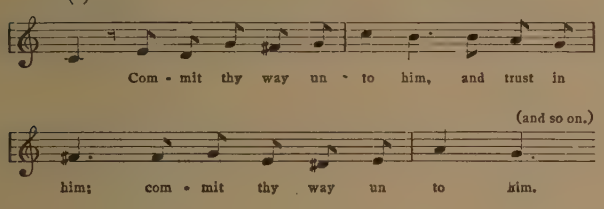
Ex. XVI

Opening, or Principal Theme



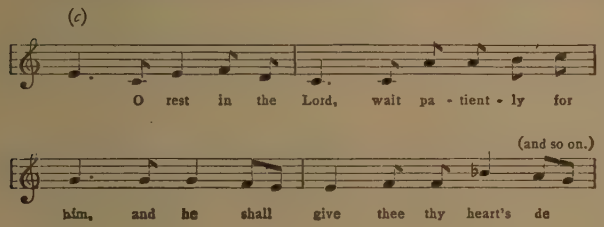
SECONDARY THEME, BEGINNING AT THE 11TH MEASURE

(*b*)



RETURN OF PRINCIPAL THEME SLIGHTLY ALTERED, 20TH MEASURE

(*c*)



The aria, then, according to the above treatment, is simply a development or artistic working out of the idea contained in the simple song form, so well illustrated in many national melodies. When this structure is found to be very highly developed with preludes to each of the themes, it goes under the name of a grand aria.

CHORUS

We have placed the chorus among simple forms, seeing that it is really a single portion of some larger work. At the same time, the chorus may contain several different movements. The chorus is intended for a large number of voices—that is, in fact, its essential explanation. It may be of any form—in unison, or concerted in two, three, or any number of parts. Monotone, recitative, chant, chorale, harmony, counterpoint, canon, and fugue may all be employed in the chorus, in any order or selection. Double choruses are also used. In these the body of singers is divided into two smaller choruses, the one responding to the other, and both coming together only at intervals.

CHAPTER V

COMPOUND SACRED FORMS

Anthem—Service—Mass—Oratorio, the Largest of Compound Sacred Forms—Examples.

ANTHEM

THE anthem (in common with the other forms mentioned in this chapter) may be called a compound form, because it may embrace several simple forms, such as some of those we have already described. Of course all anthems are not compound, but we cannot here draw such a fine distinction as to make a classification.

The anthem had its origin in the English Church. It was introduced to help to fill the gap caused by the loss of the mass music. The anthem was, and is still more or less, designed for choir performance. Of course it is quite practicable for congregations to join in some of the simplest anthems, which are not more than extended hymn-tunes; but we cannot expect the higher-class anthems to be taken part in by people with only an ordinary musical capacity, and with no previous rehearsal, while the proper rendering of such compositions may demand special musical qualifications, with close and assiduous practice.

The words of the anthem are usually a Scripture text; sometimes, however, we find a Church collect or a verse or two of a hymn employed. As far as musical treatment is concerned, the anthem occupies a wide and almost unrestricted field.

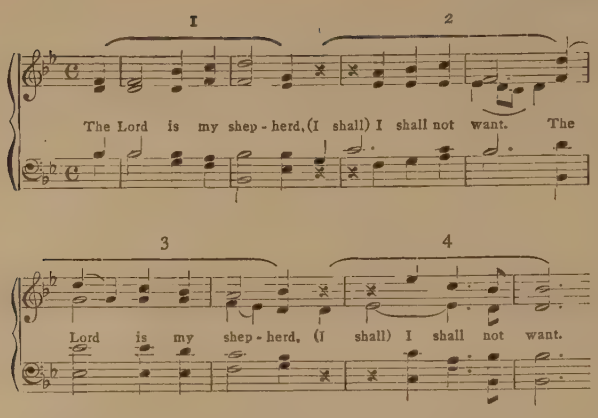
The full anthem is meant to be sung throughout by the whole choir. It may be a very simple composition, in plain four-part harmony, without broken time or separate entries for the different parts; or it may be of an advanced nature, in five, six, or more parts, containing several different movements, and dealing with the deep resources of counterpoint and fugue, with obbligato accompaniment for organ or full orchestra.

The verse anthem contains movements for single voices, called verse parts, or solo, duet, trio, or quartet, any or all of which may be used in the one anthem, besides the full chorus movements, which are generally at the beginning and the end.

Compared with the squarely measured psalm or hymn tune, the anthem is often complicated in this progression of its parts; and this very fact releases the different phrases from that rigidly uniform measurement which simpler forms admit of. Still the phrases and other pieces are as measurable in the one case as they are in the other. Here is a similar illustration (Ex. XVII):

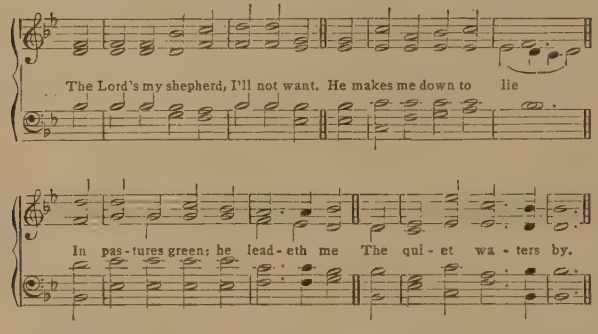
Ex. XVII

G. A. Macfarren



In the above (Ex. XVII) the phrases are as recognizable as in a psalm-tune. Where the quarter rests occur, the phrases are connected by a single voice part, but even were there neither vocal nor instrumental connection here, the balance of the rhythm would be in nowise disturbed. Now this illustration may be said to be a psalm-tune a little more highly developed. See how simply it may be reduced to a primitive form (Ex. XVIII):

Ex. XVIII



The above (Ex. XVIII) will speak for itself. The rest of the music in this anthem, and that of other anthems of a similar kind, may easily be treated in the same way as the above extract. This will help to show us the difference and the sameness to be found in two separate forms. It will also help to support what was said at the beginning of Chapter III—that it was not the nature of the pieces themselves so much as the manner in which the piecing was accomplished, that caused one form to differ from another.

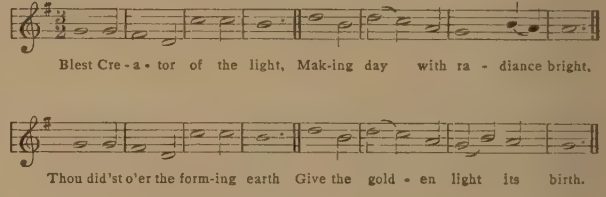
Service

This is a musical setting of the Canticles and other portions of the Liturgy. The treatment is much the same as in the preceding form; indeed, it could not be distinguished musically from that of the Anthem. In regard to the words employed, there may be less freedom permitted in the present case, so far as selection goes. In the anthem the Scripture text may be chosen from other than successive verses; even different chapters or different books may be drawn upon to furnish a suitable verbal theme. In the service, however, the words are taken as they occur in the Prayer-Book without omission or curtailment.

Mass

The mass is the principal part of the service in the Roman Catholic Church. It affords great opportunity for musical display, and many of the great composers devoted their attention to it. The text of the mass consists of several definite portions, such as the Kyrie, Gloria, Benedictus, Agnus Dei, and so on, each of which presents an opportunity for special musical treatment. Choruses, harmonic or contrapuntal, solos, duets, and other single-voice combinations, are employed according to the feeling and taste of the composer. The mass is generally written for orchestral accompaniment. It is specially intended for Church use, but it sometimes finds its way into the concert-room, where it loses much of its grandeur from the want of its natural surroundings. And yet the mass, with its rich and fascinating beauty, is made up of the same simple material that hymn-tunes are composed of. Indeed several hymn-tunes have been adapted, note for note, from the masses. Here is one which consists of the principal theme in the Kyrie of Mozart's Twelfth mass. It was popular many years ago, at a time when hymn-tunes and hymn-tune writers were less plentiful than they are now (Ex. XIX).

Ex. XIX


Blest Cre - a - tor of the light, Mak-ing day with ra - diance bright,
Thou did'st o'er the form-ing earth Give the gold - en light its birth.

Oratorio

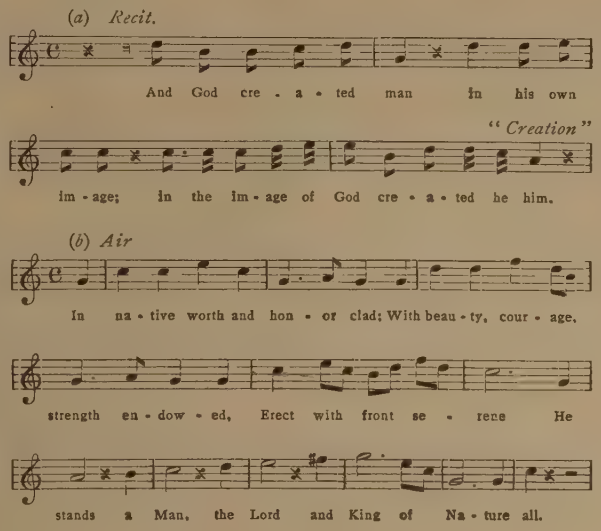
The oratorio is the largest and most popular of compound sacred forms. It is the composer's *ne plus ultra*, and the copestone of musical art. The most sublime ideas of the greatest musical geniuses have found expression in oratorio. It is a more gigantic and more comprehensive work than the mass. Being intended for public performance, it admits of, and even demands, a more powerful rendering than the mass; and it embraces among its numbers almost every possible musical device.

The text of the oratorio is of two kinds—epic and dramatic. In the first, the vocalists do not represent any characters connected with, or spoken of, in the libretto. They are simply narrators, who give a musical exposition of the story or the poem, as the case may be. Handel's "Messiah" is the best-known example of this class. In the dramatic oratorio all the vocalists impersonate particular characters, as in Handel's "Samson" and others. Sometimes we find both the epic and the dramatic combined, as in Mendels-

sohn's "St. Paul" and "Elijah." Possibly the dramatic element predominates among the standard oratorios; so that an oratorio may be safely called a sacred musical drama without scenery, action, or dresses. Among the various musical features of oratorio the chorus figures largely, and as a general rule exhibits the supreme effort of the composer. Here canon and fugue are in their most legitimate place. By these resources, and by the masterly application of them, the oratorio chorus has been raised to a height of excellence and grandeur far above every other form of vocal music.

The general musical plan of the oratorio is as follows: Instrumental introduction or overture, sometimes containing several movements; then follow recitatives, airs (solos for the different voices), duets, trios, etc., and choruses. Along with these may be found interludes and marches of such a nature as the subject may require, the whole being intermixed according to the idea of the composer. The choruses may be written in any suitable form—in simple chorale fashion, in colossal harmonic style (masses of chords richly and strongly contrasted, or in graceful and flowing counterpoint), the whole finishing with a chorus usually fugal or canonic. The only two simple forms that have anything like a fixed corelative succession are the recitative and the air—the air being usually preceded by a recitative. The words of the recitative in most cases describe briefly the situation, and the words of the air emphasize the same in more extended terms, or intensify the effect of the picture, so to speak, by the application of richer coloring, or express some poetic sentiment in sympathy with the subject—as we find, for instance, in the following from Haydn's "Creation" (Ex. XX *a* and *b*):

Ex. XX


(a) Recit.
And God cre - a - ted man in his own
"Creation"
im - age; in the im - age of God cre - a - ted he him.
(b) Air
In na - tive worth and hon - or clad; With beau - ty, cour - age,
strength en - dow - ed, Erect with front se - rene He
stands a Man, the Lord and King of Na - ture all.

CHAPTER VI

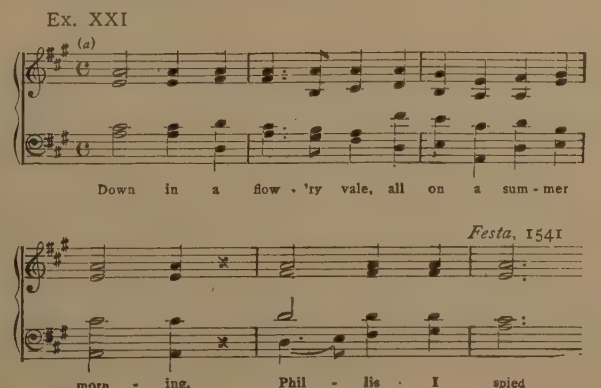
COMPOUND SECULAR FORMS

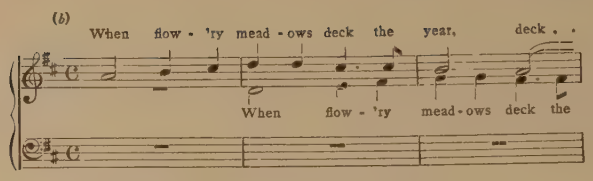
Madrigal—Glee—Part Song—Cantata—Opera: Its General Character and Varieties—Examples.

MADRIGAL

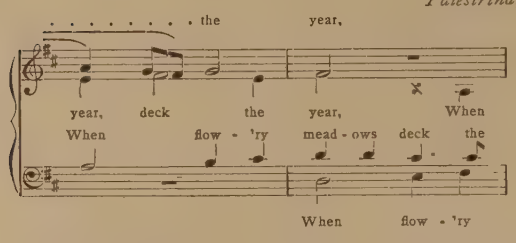
THE madrigal is the oldest of concerted secular forms; it had its origin about the beginning of the sixteenth century. It might almost have been classed among simple forms; but it is rather too extended in scope, and too complicated in its construction, for such a classification. The character of the music is in no way distinguished from the sacred music of its time, the only difference existing between the two being in the words, which in the madrigal were generally of a secular nature. The madrigal may be called an old-fashioned part song. It contained but one movement, as a rule, which was sometimes sung through to several verses. It was occasionally written in simple counterpoint, but more frequently canonic treatment was largely employed. The following (Ex. XXI) gives a specimen of each:

Ex. XXI





Palestrina, 1590



The madrigal was intended for unaccompanied chorus singing.

Glee

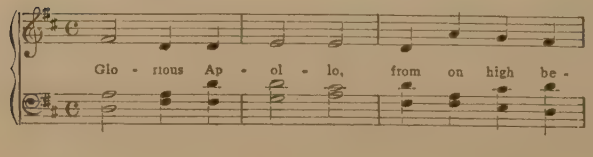
The glee was the immediate successor of the madrigal. Doubtless the madrigal supplied the fundamental elements of the glee; but the latter extended its functions considerably beyond the confines of the former. The glee had several distinct movements, including solo work, which was entirely unknown in the madrigal. In the glee there were also definite changes of key and time employed, and it included all varieties of subjects, as the following titles will show: "When Winds Breathe Soft," "Chough and Crow," "From Oberon in Fairyland," "Crabbed Age and Youth," "The Red Cross Knight," "Glorious Apollo."

The glee was written for single voices—three, four, or more parts, consequently it could not employ to advantage heavy contrapuntal devices. It required a more melodious treatment, and admitted of more grace and expression in its rendering than the madrigal. The music of the glee was not repeated to different verses.

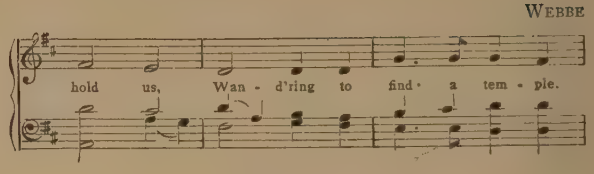
It may be pointed out that we are dealing with the most prominent characteristics of glees generally. Of course, as with nearly all musical forms, some exceptional cases may be met with, which do not conform to the description here given. For instance, one of the glees mentioned above—"Glorious Apollo"—differs nothing in its form from "Down in a Flow'ry Vale" (Ex. XXI); and were it not for its more modern tonality it might be very well classed with the madrigal mentioned. Ex. XXII gives a short extract from the glee spoken of:

Ex. XXII

GLORIOUS APOLLO—Glee for Three Voices



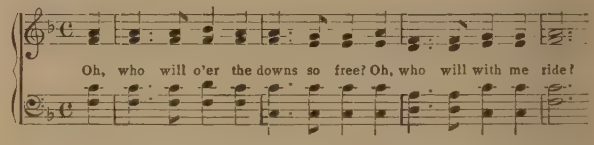
Webbe



Part Song

The part song is the latest descendant of the madrigal. In some respects it resembles its progenitor. It has usually but one movement, is intended for a number of voices, and is sometimes repeated to different verses. The chief distinguishing features of the part song are its striking effects—its remote modulations and chordal combinations. These, of course, at once stamp the part song as being the most modern of its class. Still there are some part songs which it would be impossible to separate from the glee or madrigal forms. The following well-known example is of this description (Ex. XXIII):

Ex. XXIII



The foregoing (Ex. XXIII) is every bit as much a madrigal in form as "Down in a Flow'ry Vale."

Cantata

The cantata is both a sacred and a secular form. We have placed it here, however, as belonging to the latter, because it was as a secular work that the cantata was first used. The word cantata means simply something to be sung. In its primitive form it consisted merely of a poem or story set to music of a recitative kind, and performed by a single voice accompanied by a single instrument. As time went on an air was introduced to relieve the monotony of the recitative. Later on sacred subjects were treated in cantata form, more voices were employed, and more instruments. Then came the introduction of a number of different movements. When we come to the time of Bach, we find the chorus employed, but generally in a plain and simple manner—in chorale form. The sacred cantata was at that time largely predominant.

The word cantata is now used to designate a work which, but for its limited dimensions, might well be entitled an oratorio, such as "Mary Magdalene" (Stainer), or "The Holy City" (Gaul). The secular cantata is built exactly on the same lines, there being nothing to distinguish it musically from the oratorio form.

Opera

The opera is a dramatic work intended for stage performance. Music, however, is its most important feature. The development of the opera took place side by side with that of the oratorio, and may be said to occupy as high a place among secular forms as the oratorio does among sacred forms. Viewed purely in

a musical light, the opera has scarcely, perhaps, the same power or the same emotional influence that the oratorio has, but taking it all in all, it is much the more popular of the two. In proof of this we have only to point to the large number of operas that survive and to the frequent performance of them compared with the few oratorios that live, and their infrequent performance. This is not difficult to account for. In the first place, it takes a genius of the very highest rank to produce an oratorio that shall survive its first production; therefore oratorios are scarce. In the second place, the opera appeals to a much larger constituency than the oratorio does, because it includes not only music, but scenery, acting, dressing, dancing, and other stage effects. Its powers of attraction are manifold, and therefore the opera is the more in evidence. But, it may be asked, does it not require a genius of the highest rank to compose an opera that would equal the standard oratorios? Yes. But how many operas are there that would stand the test of being sung on a concert platform without the usual stage accessories? Few.

The music of the opera consists of overture, introductions, and *entr'actes*, these being the instrumental portions; recitatives, airs, duets, trios, and other concerted pieces for a number of single voices; ensembles, choruses, and finales. The whole of the material is arranged into acts and into scenes. Of the instrumental portions, the overture occurs at the beginning before the characters appear; the *entr'actes* are introduced between the acts; and the introductions precede the different vocal numbers. The ensemble is the term applied when the characters in a particular scene sing together. The finale occurs at the end of the acts, and is often a piece of complicated and artistic work, consisting of chorus and solos simultaneously performed.

The subject of the opera may be serious, lyric, romantic, or comic. The accompaniment is always orchestral.

What is called grand opera is sung throughout, there being no spoken dialogue. In opéra comique (French) the dialogue is spoken. In spite of its name, it is not necessary that there should be anything comic in this kind of opera. The real French comic opera is called opera bouffe. In opera buffa (Italian), the dialogue is sung in simple recitative. Operettas are small operas in which the dialogue is spoken, as in the popular works of Gilbert and Sullivan.

In grand opera there are two distinct and well-defined styles employed in the composition—the lyrical and the dramatic. Italian opera is essentially lyrical; sweet, graceful, and captivating melody being the chief aim of the composer, irrespective entirely of the situation, and without regard as to its being in sympathy with the scene or the incident depicted on the stage. German opera is more truly dramatic; the music is made a real part of the scene, and assists the interpretation of the plot by giving expression, meaning, and force to the various circumstances connected with it.

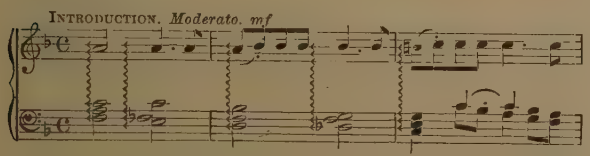
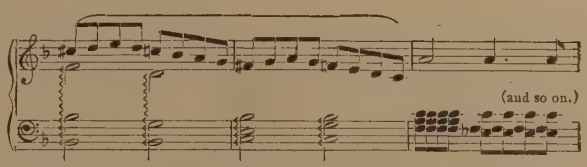
CHAPTER VII

SIMPLE INSTRUMENTAL FORMS

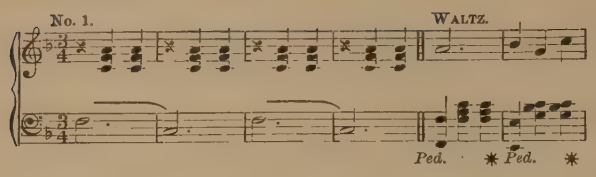
Waltz—Polka—Quadrilles—Schottische—Reel — Strathspey — Hornpipe—Jig— Gavotte — Minuet — Other Forms — Examples.

Waltz

THE waltz is a graceful movement in three-four time. It is generally counted one in the measure. Before the dance begins an introduction occurs, which may be written in any kind of time, but is usually different from that of the waltz proper. The introduction may be of any reasonable length, and of any suitable character. The following might serve for the beginning of an introduction in common time (Ex. XXIV):

Ex. XXIV

The music of the waltz originally consisted of two sections, each having eight bars in $\frac{3}{4}$ or $\frac{3}{8}$ time. Later several of these 16-bar waltzes were strung together and trios and a coda were added.

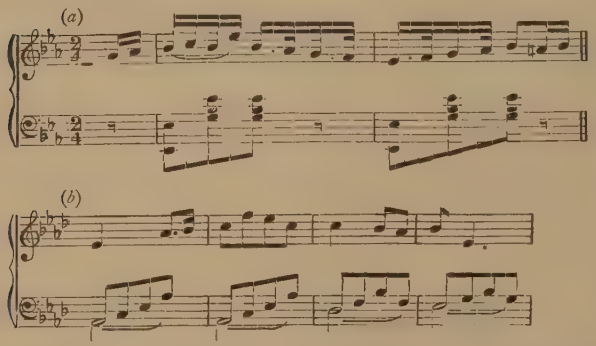
The waltz proper usually consists of a number of distinct movements of figures, each containing thirty-two measures, and generally in related keys. Each movement may or may not begin with a few introductory measures. Although the waltz is almost always written in $\frac{3}{4}$ time, a little examination will show that it is actually in $\frac{6}{4}$ time, two measures really forming one, every alternate measure being accented. This, for example (Ex. XXV):

Ex. XXV

The waltz finishes with a coda, which is usually longer than any of the ordinary movements, and which contains for its principal material the first movement of the waltz elaborated and developed according to taste.

Polka

The polka is of a light and springy nature, and is usually written in two-four time. It contains frequently two distinct movements. The first is of a lively character, with an accompaniment of three eighths, which suits the dance step perfectly (see Ex. XXVI-*a*). The second movement is commonly in the key of the subdominant, and is more songlike in its character (see Ex. XXVI-*b*):

Ex. XXVI



Each movement has sixteen measures. After the second movement the first is always repeated. The polka has seldom any introduction.

Quadrilles

Quadrilles contain a set of five different movements in related keys. Any kind of ordinary time suits the quadrille, provided the feeling necessary for the particular character of the dance be given to the music. Each movement, or figure, of the quadrille consists of a principal and a secondary subject, with a da capo finishing with the principal subject. Each figure has a few introductory measures.

Schottische

The schottische is not unlike the polka in its musical form. If it has more than one movement there is generally a change of key, but the character of the music remains much the same.

Reel

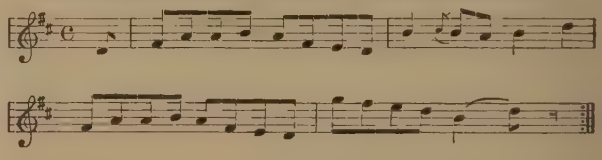
The reel is written in four-four time, and consists mostly of eighth notes. It is a one-movement form, without change of key, consisting of two distinct halves. The first half occupies but four measures, and is repeated before proceeding to the second half. The second half may likewise consist of four measures repeated; it is sometimes found, however, to contain eight measures without repetition, but then the last four measures are simply a repetition of the first four, with a slight alteration of the subject in the two concluding measures.

Strathspey

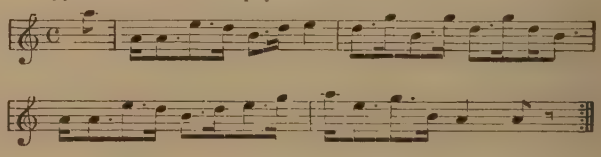
What has just been said regarding the reel form applies pretty much to the strathspey. At the same time there is a marked distinction between these two forms, as the strathspey is written almost entirely in dotted eighths and sixteenths, following each other in succession. This gives the strathspey a jerky and rugged rhythm, and makes the music of a somewhat wilder character than the reel. The two following extracts will plainly show this (Ex. XXVII):

Ex. XXVII

(*a*) 1st half of Reel—"The Wind Shakes the Barley"



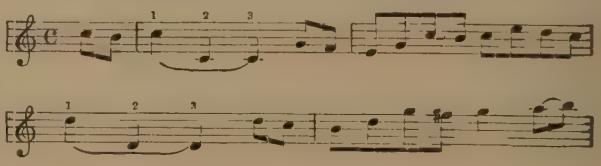
(*b*) 1st half of Strathspey—"Miss Drummond of Perth"



Hornpipe

The hornpipe form is a single movement in two halves of eight measures each, each half being repeated. It is written in four-four time, and is of a cheery character and squarely cut rhythm. One of its most distinctive features is the prominence given, at intervals, to the first three pulses of the measure. This will be noticed in the following extract (Ex. XXVIII):

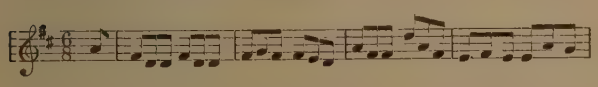
Ex. XXVIII

First four measures of "Sailor's Hornpipe"

Jig

The jig contains sixteen measures of music divided into two repeated halves. It is usually in six-eight time; and, consisting almost entirely of eighths, it produces a peculiar pattering effect. (See Ex. XXIX.)

Ex. XXIX

First four measures of "Paddy O'Carrol."



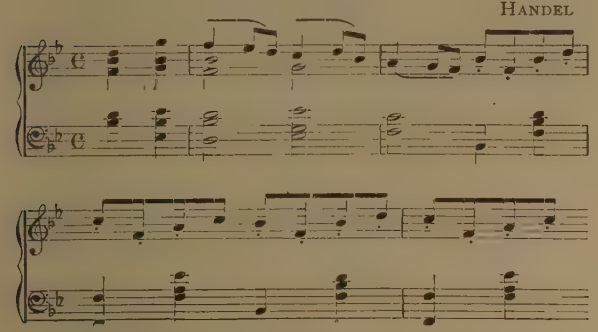
Gavotte

The gavotte, although not popularly known as a dance tune at the present day, demands attention from the fact that it has been raised to the position of a classic, by being selected as a form for composition by many of the great masters. It is written, as a general rule, in four-four time, and begins on the third quarter of the measure. The gavotte is usually long enough to embrace two or three subjects in related keys. It also may contain two distinct movements, and generally ends with its initial subject. The character of the music is always bright, no matter whether the key be major or minor, and has a strong staccato feeling about it. (See Ex. XXX.)

Ex. XXX

First four measures of Gavotte in B♭

HANDEL

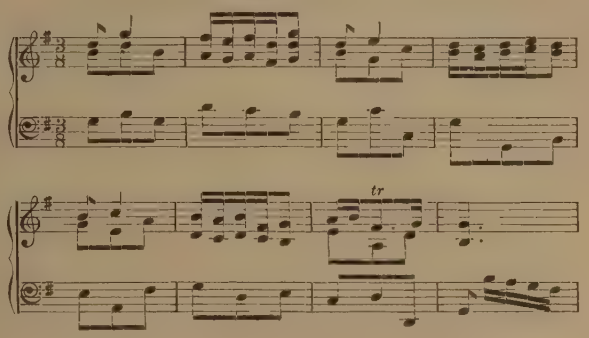


Minuet

The minuet also is antiquated as a dance tune; but as we find it so repeatedly used by the great composers to constitute a movement in some larger work, the minuet must be considered as a familiar musical form. The minuet is written in triple time, and is of a cheerful and stately character. It frequently consists of two distinct movements, the second of which is called the trio, as it was originally intended for three different instruments. The sonatas of Mozart and Beethoven contain numerous examples of the minuet. The following extract is from Handel's overture to "Samson":

Ex. XXXI

Principal Subject in Handel's Minuet from "Samson."



More Obscure Forms of Dance Tunes

Under this head we may mention the allemande, the bourrée, the courante, the sarabande, the chaconne, the gigue, and the loure. Of these the first two were written in common time, the next three in triple time, and the last two in twelve-eight or six-eight time. These dance forms supplied a large amount of melodic figure and rhythmic design, which the older composers were not slow to take advantage of. Corelli, Purcell, Handel, Bach, and others produced many examples of the above forms. A favorite device of these writers was to unite several of these old dances in a series which was called a suite. The suite, however, is a compound form, and is mentioned further on in its proper place.

CHAPTER VIII

MORE EXTENDED INSTRUMENTAL FORMS

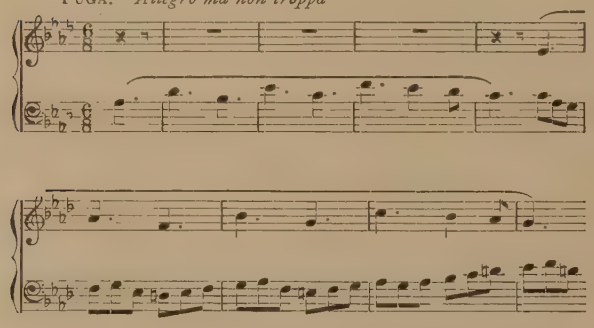
Capriccio—Fantasia—Extravaganza—Potpourri — Scherzo — Rondo—March—Examples.

Capriccio

THIS may either be entirely original, or it may consist of themes taken from some other composition. The treatment of the capriccio, or caprice, assumes no fixed form or style, the composer being free to turn and twist and caper with his subject or his themes, as he may feel inclined. In some cases he may, if he think fit, in an unfettered manner approach the style of some fixed form, such as the sonata movement, the rondo, or even the fugue. In other cases there may be no resemblance to any definite form. Of course there must always be cohesion and relationship among the passages of the capriccio, no matter what peculiarities or eccentricities be indulged in. The capriccio is always of a light and animated nature. It might therefore be considered unsuitable for fugal treatment. Of course, in such a case, the greatest freedom is allowed in regard to the ordinary rules of fugue writing. As an illustration of this, the second movement of Beethoven's sonata in A♭ major, Op. 110, affords a good example (Ex. XXXII):

Ex. XXXII

Fuga. *Allegro ma non troppa*



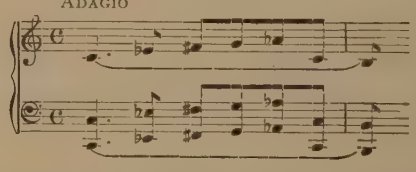
This shows the nature of the subject and answer, and also the counterpoint employed. This counterpoint goes on unremittingly to the end: now and again the subject appears in various keys, but it is not always regularly answered, and some very interesting canonic imitation takes place in the counterpoint. At the forty-eighth measure the subject appears in the bass, in octaves strikingly and characteristically altered. Twenty measures farther on there is some appearance of a stretto, but it is not carried out. A little farther, we come to a short pedal, and almost immediately following the original subject appears in the bass. After a few chords, and one or two straggling arpeggios, the arioso dolento that preceded the fuga comes in again, embellished and slightly modified, in the key of G minor. After the arioso a few staccato tonic chords in the major key of G introduce us once more to the subject of the fuga in that same key. This time, however, the subject is inverted: it is answered, in the key of the dominant. It is given out again slightly curtailed in the tonic key, and answered, still more curtailed, in the key of C minor. Then the principal figure of the subject appears in the key of G minor. Here every note is syncopated, and the accompanying parts imitate each other in canonic figures. The whole subject then appears in the bass, in octaves, but still syncopated. After this, the music changes to meno allegro, and the fugue subject is treated to modern accompaniment in broken chords, in the key of A♭, finishing, after some harmonic and sequential development, with a few arpeggios.

Fantasia

Like the preceding, the fantasia has no settled form. Indeed, what was said about the capriccio might equally apply in the present case, with this exception, that the fantasia is not always of the same light and playful nature as the capriccio. The following initial phrase from a fantasia by Mozart will verify this (Ex. XXXIII):

Ex. XXXIII

Adagio



Of the first fifteen measures of this fantasia, thirteen are taken up with modified imitations of the above phrase, two of which are inverted, in various keys, as follows:

1st time, as above, in the key of C minor, beginning on the tonic.

2d time, in the key of F, beginning on the subdominant.

3d time, in the key of D♭, beginning on the dominant.

4th time, in the key of D♭, beginning on the leading-note.

5th time, in the key of D♭, beginning on the tonic.

6th time (inverted), in the key of B♭ minor, beginning on the supertonic.

7th time (inverted), in the key of E♭ minor, beginning on the dominant.

8th time, in the key of B, beginning on the tonic.

9th time, in the key of B, beginning on the leading-note.

10th time, in the key of D, beginning on the dominant.

11th time, in the key of F minor, beginning on the mediant.

12th time, in the key of C, beginning on the dominant.

13th time, in the key of E♭ minor, beginning on the mediant.

Except the opening phrase there is not a single progression in the key of C minor from the beginning to the end of the movement. This is all fantastic enough, but the music is lovely.

Extravaganza

The object of the extravaganza is to treat the subject in a somewhat comical fashion, or to burlesque well-known themes. It is entirely without order or design of any kind. Of course extravaganzas may be and have been written with something like regularity and order in their construction; on the other hand, the phrases and sections of this style of composition may often be found devoid of all balance, the keys not too well considered in respect of their relationship, and the effects produced and the means taken to produce them not always quite legitimate.

Potpourri

The potpourri is an instrumental medley of popular airs strung together in a somewhat haphazard kind of way. When performed by a military band to an open-air audience it generally proves attractive.

Scherzo

The scherzo is perhaps the lightest and most playful of instrumental pieces. It is used as one of the movements of a sonata or a symphony. The form of the scherzo is of two kinds—it either resembles the minuet or the rondo. In the former case it is divided into two distinct parts. In the first part we have the principal theme given out and elaborated. In the second part, which is called the trio, a new theme appears in a related key: the theme of the trio is usually of a less whimsical nature than the principal theme. After the trio the first part is repeated. When the rondo form is adopted the scherzo is generally very much longer, and the principal subject is more freely and more humorously treated than in the rondo proper.

In Beethoven's sonata Op. 31, No. 3, we have a good specimen of a scherzo in the rondo style. This is the only scherzo which Beethoven wrote in two-four time. It contains one hundred and seventy-three measures, and the principal theme appears six times in various keys and with modified figures.

Rondo

A rondo may consist of any number of subjects. These subjects may be repeated in any order and any number of times, provided the principal subject is made to close as well as to open the movement. As the subjects appear in succession, they may all change their keys except the principal, which generally keeps to the original key, no matter how often it may appear. It is this recurrence, or coming round again of theme and key, that gives the name of rondo to this form of composition.

The idea of the rondo, while it may be expressed with no small amount of complicated detail, is of the very simplest description. It is to present to the ear, and to the mind, something that has been heard before, something that may be easily recognized, and which, by reason of the recognition, will afford satisfaction and pleasure. This is why the principal theme of the rondo is so frequently brought round again, and always in its original form and complexion. The simplest (first) rondo consists of a subject, or section, a second section, and a return of the first section. The second section may then be repeated, followed by another repeat of the first section; in which case the form is called first rondo extended. Most usual, especially in the later movements of the symphony, is the so-called second rondo. This consists of first, second, first, third, and first sections, occurring in the order named. At the end of the rondo, as after any piece, a coda may be added if desired, to form a suitable close. There are other varieties of this form, besides the sonata rondo and sonatina rondo. The student must learn to distinguish between the rondo and the so-called song-forms, the latter being more clean-cut but less plastic in style. For a fuller description, see the article on "Drawing-room Music and its Forms," by Louis C. Elson, in this series.

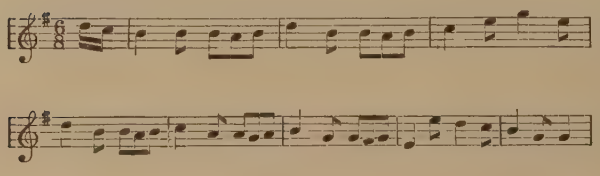
Song Forms

The song forms (vocal or instrumental) are built up of so-called periods, consisting of two phrases, antecedent and consequent. The form is rarely limited to a single period. It may be bipartite, with two wholly or partly independent periods; or tripartite, consisting of a period, a second period or free episode, and a return (wholly or in part) of the first period. See article on "Drawing-room Music and its Forms," by Louis C. Elson, in this work.

March

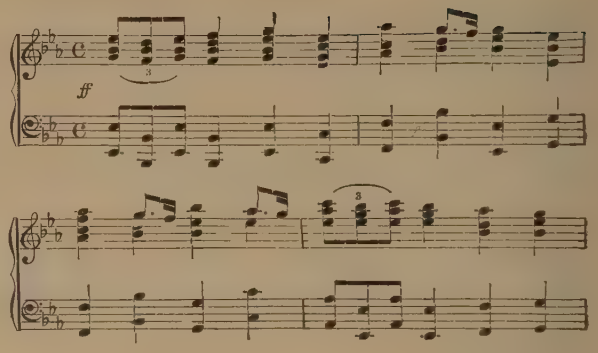
The march is perhaps most closely associated with military movements; but it frequently finds a place in the concert-room, on the stage, and in the church. The military march is always of an inspiring nature, and consists largely of stirring melody and strongly marked and simple rhythm. Used for other than military purposes, the character of the march is varied—its constitution becomes more or less polyphonic. This we find to be the case in orchestral marches, wed-

ding marches, processional marches, funeral marches, and others. The march, especially the military, often begins with the last beat of the measure. The starting-note prepares the mind for the step-off, which takes place on the following strong accent, insuring precision and uniformity of movement. In other than military marches this preparatory note is dispensed with. Sometimes also we find several preparation-notes employed—the dominant repeated a number of times being a favorite device. Even an introduction of several measures before the subject of the march begins is not uncommon. The march is usually written in four-four time. Some examples of two-four are to be found, but triple time would be unsuitable, and would throw the strong accent alternately on the left and right foot. In quick marches, where the step is required to be quicker and the whole action more nimble, such as in a "March Past," sometimes a six-eight rhythm is adopted. The following is a well-known example (Ex. XXXV):

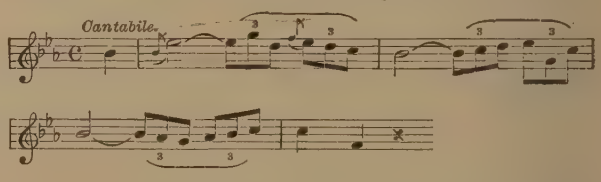
Ex. XXXV
First Period of "March Past."

Simple march forms have only one part, containing two distinct subjects. The two subjects represent exactly two equal halves of the movement. The sections are invariably of a uniform length, and the phrases are evenly balanced. (See Handel's "Dead March" in "Saul.") Sometimes the march finishes with the second subject as in the example just named, and sometimes the first subject is repeated after the second. This, of course, is the song form. More extended march forms have two or three parts, the second of which is sometimes called the trio. Each part may contain two or more subjects.

Sometimes solo movements are introduced into the march. A very effective illustration of this is to be found in Meyerbeer's "Coronation March." This march opens full, thus (Ex. XXXVI):

Ex. XXXVI



At the eighteenth measure the solo movement, of sixteen measures in the original key, begins thus:



After which the opening subject occurs in the relative minor key leading back to the major. Then follows the solo movement again, this time in the subdominant key with a repetition in the original key. The march is then brought to a close by a full finale movement of twenty-three measures in which occur snatches of the opening subject, mixed with some new material.

The scope of the march is greatly extended. Indeed, it may be said to range from the sublime to the ridiculous. As an exemplification of this we have only to compare the solemn grandeur of Beethoven's "Funeral March" with the grotesque comicality of Gounod's "Funeral March of a Marionette."

Taking the march form, however, in its ordinary comprehension, we can only say that its chief features are predominant melody, evenly balanced measure, simple and strongly marked rhythm, squarely cut phrases, and uniform sections. Marches are written for the pianoforte, the organ, for brass and military bands, and for orchestra.

CHAPTER IX

COMPOUND FORMS

Suite—Sonata: Elaborate Analysis of This Form—Overture —Concerto—Symphony.

COMPOUND forms contain several different movements—we might almost say separable movements—such, for instance, as the employment in succession of two or more of the simple forms already described, so as to form one composition having a distinctive and comprehensive title.

Suite

The suite was the earliest of compound forms. It consisted of a series of old dance tunes. It usually began with a prelude or introduction, as modern waltzes frequently do, and sometimes finished with an air with variations. This latter movement consists of a melody being given out first in its simplest and plainest possible fashion, and then repeated several times, each repetition introducing some variation of rhythm or melodic configuration. The air known as "The Harmonious Blacksmith" finishes one of Handel's suites. Suites were written for the harpsichord, for violins, and for the organ.

Sonata

The sonata is the most important and the most law-abiding, so to speak, of all compound forms. In earlier times it was a much different thing from what it is at the present day; yet the sonata of the seventeenth century might be considered as a faint prototype of the modern and highly developed compositions of Haydn, Mozart, and Beethoven, which bear the same name. The old sonata was little more than a suite, and as such it contained at least one of the prominent features of the modern sonata—a succession of varied and independent movements.

The modern sonata contains three or four distinct movements, but here its resemblance to the older form might be said almost, if not entirely, to cease. Not only are the themes of the different movements in the modern sonata more extended, elaborated, and developed than in its predecessor, but the first movement is held subject to a certain order of treatment which is in itself sufficient to distinguish the modern sonata from other musical forms. It was Haydn who fixed the form of the first movement, and all succeeding composers have followed, more or less strictly, on the lines adopted by him. This first movement is called the binary form, because it contains two subjects or themes; the opening theme being in the key of the tonic, and the following or secondary theme being in the key of the dominant, when the key is major; when the key is minor the second subject is most usually in the relative major, and rarely in the dominant key.

The first movement consists of three parts, and may be explained thus:

The first part is called the exposition or the announcement. Here the two themes are given out in respective order. Generally a concise closing theme follows, usually in key of the second theme. In legal terms this might be considered as the statement of the case. This part, which finishes in the key of the second subject, ends with a double bar, and is always repeated.

The second part is called the working-out, or the development. Here the two themes, unconfined to any particular keys, are extended, embellished, and contrasted by means of modulation, inversion, imitation, and harmonic and rhythmic devices. This part bears a direct analogy to the enlargement, argument, or discussion of a pulpit or platform discourse; or to the examination, overhauling, and explanation of the circumstances connected with a case at law. The second part is not repeated, and consequently is not marked off by a double bar, but leads directly into the third part.

The third part is called the repetition or the recapitulation. Here the key of the tonic predominates, and these subjects are again presented to us in a prominent fashion, in less rigid succession, perhaps, than in the first part, but this time all in the tonic key. This third part is exactly similar to the peroration of a discourse, or to the summing up of the evidence in a legal court.

Now let us examine briefly a few of the objects sought to be attained by the formal arrangement of the first movement. In the opening portion the two themes are given out in different keys to insure some variety; but the keys are always those most familiar to us, in point of relation, so that we may not be distracted from grasping the subjects clearly and with the least possible effort. This part is repeated, so that the principal matter of the composition may be the more deeply impressed upon the mind. The first part is the only part that is repeated. The subjects being fresh, the ear gratefully accepts their repetition; but in a later part, after the frequent recurrence of the themes, repetition might become wearisome. The first part ends in the dominant, or some related key, so as to lead the ear to expect something to follow.

In the second or middle part the composer has freer scope for his fancy. Here we are led, if we may be allowed the simile, away from the common highway, by a side-path, into the intricacies of rich and variegated scenery. The individual objects around us are not altogether unfamiliar. We have seen them before under somewhat different aspects; but here their artistic arrangement and wonderful combinations open up a new and wide field of delight. Here, while still retaining a vague sense of our locality, we may revel in new beauties, and lose ourselves in admiration and

amazement, until we are guided back again to the road from which we first started, and where we easily recognize the broad landmarks that first attracted our attention, thus reaching the third part.

In the third part our feelings are soothed, our excitement is calmed—we are once more at home, so to speak. The principal key prevails, and the two familiar subjects are presented to us in their most recognizable garb—the key of the tonic, so that the conclusion of the movement is rendered easy of apprehension and thoroughly satisfactory both to the ear and the mind.

We have tried to show that the material employed in the first movement of a sonata occurs in a strictly psychological sequence. It interests and engages the mental faculties in a purely rational manner, and calls forth a succession of ideas in the same order that would naturally result from the consideration of almost every subject. The general features of form which we have detailed will be found to predominate, more or less, in the first movement of all sonatas built on orthodox lines. Of course, were we to deal with minute details we should find those features represented in numberless modifications, and surrounded by qualifying matter too varied to particularize. Nevertheless, a persevering analysis will always disclose the distinguishing essentials of the modern sonata wherever they are present. This last sentence would seem to imply that the distinguishing features of the modern sonata are not always present. Such, indeed, is the case. Examples of sonatas are not wanting in which the necessary features are either but partially adopted or are not employed at all. The student must learn to discriminate as to the classification of such cases according to his own judgment. We have specified accurately the form of the sonata first movement; and where this form is not found to exist, the composition, although thereby perhaps not a whit the worse as a composition, must be held to be somewhat irregular.

In examining the above, the student will notice that there are other passages employed besides those of the two principal subjects. These passages are employed simply to give variety; to relieve the music, so to speak; to keep the composition from becoming too stiff and formal; to afford an unfettered opportunity to the composer to exercise his fancy. The passages referred to have a good deal of license allowed them. An episode is a passage of some little importance, but which ostensibly belongs to neither of the two principal subjects. A run is a progression of single notes without any decided melodic form. A transition is a short passage filling up the gap between the end of one theme and the beginning of another. Modulating passages explain themselves.

To distinguish the principal subjects from what we might call the auxiliary matter—that is to say, the episodes, codettas, modulating and other passages—is frequently somewhat difficult, owing, as often happens, to the excess of the auxiliary over the principal matter. This, however, must be satisfactorily accomplished in every case before we can say definitely whether or not the first movement is built upon strict principles. The following is a plan of the first movement of Beethoven's sonata Op. 2, No. 1:

1. Chief theme, F minor, measures 1–8; tributary passage, modulatory, measures 8–20.
2. Second theme, A flat major, measures 20–41.
3. Closing theme, A flat major, measures 41–48. Repeat of divisions 1, 2, and 3.
4. Development, founded on parts of the first and second themes, measures 49–93. Returning passage, measures 93–100.
5. Return of chief theme, F minor, measures 101–108; tributary passage, with modulation altered, measures 108–119.
6. Second theme, F minor, measures 119–140.
7. Closing theme, extended, F minor, measures 140–152.

There is no coda. The repeat of the development and recapitulation is not necessary now, though usually called for in Haydn's time. The exposition, however, must always be repeated.

For a good example of the sonata form with the exposition in the tonic and dominant minor, the student may look at the finale of this same work. In place of the development in that movement is a section of new material, called the middle part. Its major mode forms an excellent contrast to the constant minor of the themes.

A form closely resembling the sonata is the so-called sonata rondo, with divisions as follows:

1. Chief theme, as in sonata.
2. Second theme, as in sonata.
3. Closing theme, as in sonata.
4. Chief theme in tonic. (No repeat of divisions 1, 2, and 3 is made.)
5. Middle part, or development; if the latter, it is not as extended as in the sonata form.
6. Return of chief theme, as in sonata.
7. Return of second theme, as in sonata.
8. Return of closing theme, as in sonata.
9. Chief theme, or part of it, in the tonic.

A coda may be added if desired. A good illustration of this form may be found in the final movement of Beethoven's "Sonata Pathétique." It will be noticed that the succession of keys is the same as in the sonata movement, and that the two forms are much alike. The sonata rondo, however, has no repeat of themes before the exposition, but gives instead an extra return of the chief theme, both after the exposition and at the close of the movement. The chief theme in this form thus has more prominence than in the sonata form. Being given more often than the other themes, like the first section of a rondo, it should consist of interesting material, and be made noticeable enough to insure proper balance.

The sonatina, which has been used by many classical writers, is a form resembling a small sonata without closing theme or development. It consists, therefore, of the following divisions:

1. Chief theme, major or minor.
2. Second theme; if the first is major, the second is in the key of the dominant; if the first is minor, the second is in the relative major. These two themes may be repeated.
3. Chief theme, in original key.
4. Second theme, in key of chief theme.

The sonatina has two or three short movements, the second often being a simple song form and the third

variable. The works of Clementi or Kuhlau afford good examples for the student.

Sometimes, after the fourth division of a sonatina movement, the chief theme returns at the end. The best modern theorists call this a sonatina rondo, as the key scheme distinguishes it from the first rondo extended.

So far we have only described the first movement of the sonata; the succeeding movements require but a few words. The composer is perfectly free to arrange the order and succession of those secondary movements according to his own ideas. After the first movement, which is very frequently an allegro, we often find an adagio, a largo, or andante for the second movement. In this case the music invariably partakes of a song-like character. It is often a song form, or a short Rondo. The third movement, in the full four-movement form, is either a minuet or scherzo. Sometimes this may come second and the slow movement third. The finale is either in the form of the first movement (sonata-allegro), or a rondo, or a theme and variations. In the three-movement form the minuet or scherzo is usually omitted.

In concluding this notice of the sonata form, we must warn the student not to expect our description to tally with every sonata. As we have already said, the rules regarding the first movement according to Haydn are generally accepted as orthodox; but there are innumerable sonatas to be found to which the Haydn principles do not apply. For instance, the first movement of Beethoven's sonata Op. 49, No. 2, has really no middle part. His Op. 29, No. 2, known as the "Moonlight" sonata, has a first movement peculiar to itself. His Op. 26 is not a sonata at all, but simply an air with variations—unless we consider it to be built upon the lines of the old suite.

The sonata is most usually written for the pianoforte; but the form is not unusual for string combinations. Organ sonatas also are to be found; but these have little in common with the form described above, being more massive in their build, and of a contrapuntal and fugal nature.

Overture

The overture is the opening number of a vocal work, such as an opera or an oratorio. The real purpose of the overture should be to prepare the minds of the hearers for what is to follow. The overture is not an integral part of the work, but it should exhibit some of its characteristics, or at least have some intelligible relation to it. All overtures do not do this. In Handel's time the overture had no connection with the body of the work whatever. At that period it was of a more fixed form than at the present day. The old Handelian overture was invented by the French composer Lulli (1633-87), and consisted of a slow harmonic movement followed by a quicker movement in the fugal style. The second movement was somewhat longer than the first. Compare the overture to "The Messiah" (Handel). Sometimes a dance tune was introduced. Compare the overture to "Samson" (Handel). This form was adopted both for oratorio and opera.

After Handel's time the old French overture, as it was called, was largely discarded, and a new style began to be developed, which, in opera at all events, sought to foreshadow the scenes or circumstances depicted in the work itself. The form adopted, however, was of no particular order. Sometimes the principal musical themes in the opera were employed in the overture with introductory and connecting passages of various designs; sometimes the themes were artistically blended, contrasted, and supplemented by striking orchestral surroundings, and occasionally a free fugal treatment was adopted.

The oratorio overture of the present day and of recent years has also undergone a change somewhat similar to that of the operatic overture. Perhaps the latest oratorio overture of any importance written on the lines of the old French overture is that to Mendelssohn's "St. Paul." In his following work, "Elijah," Mendelssohn chose a more modern form of overture—one movement in free fugal style. Other less important oratorio overtures borrow themes from the body of the work; but it is difficult, if not altogether impossible, to trace any feature by which the overture may be peculiarly distinguished, beyond the fact of its being the introductory number of the particular work to which it belongs.

There is, however, another class of overture called the concert overture. This is quite an independent composition. It is not used as an introduction to something following. The concert overture has generally some title attached to it, which may be supposed to indicate the nature or the purpose of the composition, as in Mendelssohn's "Hebrides," Schumann's "Julius Cæsar," Sullivan's "In Memoriam," and so on. Very often we find the concert overture bearing strong resemblance to the first movement of a sonata; at other times the rondo character is prominent. Mendelssohn's overtures sometimes exhibit a rondo-like character; but, unlike the rondo proper, the principal subject, as it recurs, appears in several different keys.

It will be seen, then, that if we omit the French overture of Lulli, it cannot be said that the subject of our present notice has any distinct form. It is quite proper, whatever its form may be, that it should be called an overture when it is the opening number of a work, but as an independent concert-piece it might just as well be called by any other name.

Concerto

A concerto is a composition written for a solo instrument and orchestra. The violin and the pianoforte are the two instruments most commonly employed for the solo work, but concertos have been written in which the organ, the flute, and the clarinet have had respectively the solo work assigned to them. In a concerto the solo part is designed to display the skill of the soloist. Notwithstanding this, however, the orchestra must not be considered as a mere accompaniment. This would be making the work a homophonic composition; while, as a matter of fact, it is essentially polyphonic, the work of the orchestra being quite as important as that of the solo instrument. The two—the orchestra and the solo instrument—perform mutually together; they play to and for and with each

other; they work in concert, so to speak; hence the term concerto.

The concerto consists of three movements, very much resembling those of the sonata. The first movement differs slightly from the sonata first movement in this respect: the laws regarding the giving out and key-relationship of the subjects are not so rigid. The second subject in the concerto frequently finishes in the key of the tonic. There is also frequently a third subject introduced, and the episodes throughout the movement are more important than in the sonata. In the first movement of the concerto the subjects are first given out by the orchestra, and then repeated in a modified or elaborated form by the soloist. Sometimes the phrases of the themes are divided between orchestra and soloist, in a kind of antiphonal fashion, and extended and developed in various ways.

The succeeding movements are similarly dealt with according to their form, but on a less comprehensive scale.

Symphony

The symphony is purely an orchestral composition. (Beethoven, it is true, in his Choral symphony has employed voices along with the orchestra; but this is an exceptional case.) For its form the symphony is indebted, like all other instrumental compound forms, largely to the sonata. Like the sonata, it consists of several distinct movements; but in the delivery of its principal themes it is, like the overture and the concerto, less exacting than the sonata. In the symphony all the resources of the orchestra are fully employed; it is therefore more colossal in its proportions, more varied in the details of its development, and more comprehensive in its themes and episodes than any other instrumental form. It is the noblest and grandest of its kind.

The composition of a symphony requires the very highest musical experience, skill, and feeling. All the devices of musical art are brought into operation in the symphony. A knowledge of orchestral effects, the power to devise melodic themes of striking and appropriate character, a keen appreciation of harmonic coloring, a fertile conception of rhythmic figures, the faculty to arrange large groups of phrases in symmetrical order—these are some of the qualifications which the mere formal construction of the symphony requires, to say nothing of the genius and the inspiration which that stupendous work in its ideal character demands.

Conclusion

We have endeavored to give a plain and simple explanation of the most important and best known musical forms. Those which we have not described are, in the majority of cases, of an obscure or unimportant kind, and will be found to be sufficiently explained in any ordinary dictionary of musical terms.

CHAPTER X

HARMONY

Definition—Difference between Harmony and Counterpoint—Complex Counterpoint and Simple Harmony—Of Italian Origin—Emancipation of Harmony—Chopin's Harmony—Grieg—Wagner—Monotony and Restlessness—Theories of Harmony—Necessity for Rules.

THE simplest definition of harmony that can be given is that it is the sounding together of two or more different musical tones. The most elaborate treatise, however, could not exhaust the resources of the possible harmonic combinations and sequences. Whenever a new genius arises he finds a way of expressing himself in harmonies that do not sound like those of his predecessors. Bach's "Saraband" of 24 bars in the G minor "English Suite" contains about as many harmonic changes as Grieg's song "Du bist der junge Lenz," of 28 bars. Yet these two pieces differ as widely as do the two hundred years that separate the dates of their composition. This difference of manner is to be found between contemporary composers as well as between old and modern masters. No one who knows anything of musical style could confound the harmonies of Bach and Handel. How utterly unlike that of Bach is the 24-bar "Saraband" in Handel's G minor suite, No. 16. Mendelssohn and Schumann, Brahms and Wagner, Chopin and Liszt, Strauss and Elgar, Weber and Schubert, Berlioz and Meyerbeer all worked during the same periods of musical development; yet their harmonies are not alike. Sullivan and Grieg were fellow-students in Leipzig. The violent contrast between their styles only emphasizes the extraordinary resources of harmony, which up to the present have proved inexhaustible.

During the great contrapuntal epoch little attention was paid to harmony; that is to say, the composer did not choose his harmony and then make his counterpoint fit his harmonic scheme. It was the counterpoint which received the lion's share of care and attention, while the harmony was as ignominiously treated as the poor sheep in the fable.

It is of course impossible to make a contrapuntal

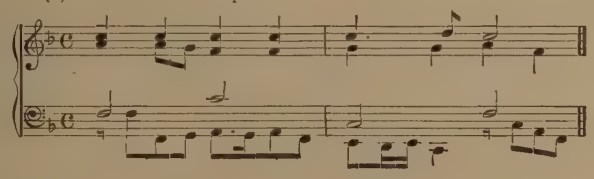
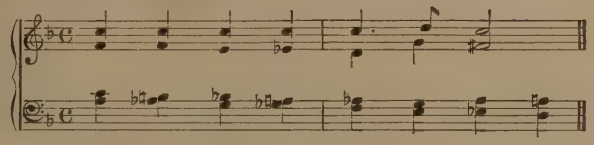
combination that does not produce some kind of harmony. It is possible, however, to have a very great contrapuntal complexity with the most meager harmony; as, for instance, in Tallis's motet "Spem in alium non habui," where we frequently find a forty-part counterpoint with no change of harmony for several bars. Such a Barmecide feast of visionary and unreal fare cannot satisfy the cravings of the heart for genuine musical substance; for the deepest note of musical emotion can be sounded by harmony only. Harmony is the color, the warmth, the passion of music.

Palestrina, though he lived in the contrapuntal day before the discovery of the tempered scale, was an inspired composer. His music, because of the varied chords which his ingenious counterpoint often makes, delights us to-day. He was fettered to the Church, unfortunately, and all his greatest works are yoked to the turgid Latin text. The painters of his day wrought altar-pieces, crucifixions, and Madonnas till all the walls in Italy were draped in penitential canvas. But the blue and gold and purple haze of the sunny Italian landscapes, which have been the inspiration of so many glorious pictures from Titian to Turner, were also beginning to make their genial warmth felt within the shady aisles of the cathedrals. On the shores of the Mediterranean or the Adriatic, whose azure waves still sparkle in the verse of Vergil, Tibullus, Catullus, the sense of harmony first found its voice. It is not improbable, as some authors affirm, that St. Mark's in Venice was the cradle of harmony. Certain it is that in the compositions of the masters of music who directed the musical services of this gorgeous Romanesque-Byzantine church, during the first half of the seventeenth century, we find a relaxing of the rigid rules of counterpoint, and the introduction of the sensuous element of beautiful chord changes, undoubtedly an expression of that harmonic instinct which is such an integral part of the modern composer's nature. The old masters of counterpoint could hardly have imagined that in admitting a few harmonic effects into their compositions they were introducing an element that was destined to assume so much importance and drive counterpoint from the field altogether.

The difference between harmony and counterpoint has been aptly set forth by Ouseley, who says that the harmonist looks at the chords perpendicularly, while the contrapuntist considers the importance of each separate melody; that is to say, looks at the composition horizontally. From the viewpoint of the harmonist it is of little importance what manner of melody the separate voices make if each voice is played alone. He considers the effect of each complete chord and its progression to the next complete chord. But the contrapuntist aims at having each voice a melody in itself. Harmony sacrifices a great deal of detail of fine part-writing for the sake of the general effect of the whole. Counterpoint, in the strictly classical sense of the definition, has a powerfully restraining influence on the harmonic freedom of the composer. Paradoxical as it may sound, it is nevertheless true that the student of practical composition finds the difficulties of counterpoint to lie in the harmonic progressions, and the obstacles in harmony to be the part-writing—that is to say, the counterpoint.

In the first example (*a*) given below are combined three well-known tunes and a florid counterpoint bass in the manner of the eighteenth-century masters. The soprano melody is Sullivan's "Onward, Christian soldiers"; the alto is from J. J. Rousseau's "Le devin du village"; the tenor is the theme of the variations in the finale of Beethoven's "Eroica" symphony; and the bass is our own. This, of course, has no musical value, but it will serve to illustrate the manner of elaborating themes in vogue before the days of harmony. There are only two chords, F and C, in the example, and the themes stand out clearly one from the other by reason of the contrasted lengths of the notes of which they are constructed.

In the second example (*b*) the melodic material is reduced to the one Sullivan tune, here harmonized in a modern manner, more or less like Grieg's "Ballade" for piano solo. It will be seen that the interest consists in the progression of one complete chord after another complete chord, and not in the variety of rhythms of a number of tunes which are apparently independent of each other. The first example has four themes and two harmonic changes; the second has one theme and eight different chords:

(*a*) Diatonic counterpoint.

(*b*) Chromatic harmony.

Berlioz, great musical colorist and impressionist as he was, detested the old contrapuntal style. "Why," he exclaims, "should the vanquishing of the difficulties of counterpoint be supposed to add to the religious sentiment of a work?" He even questions Palestrina's right to be called a composer. He avers that most of the old Italian's work consists of four-part perfect chords with a few suspensions, without melody and without rhythm, and that there is only evidence of a patient science in overcoming certain artificial contrapuntal problems.

With Bach's fugues Berlioz was continually at enmity. The brilliant French composer's contempt for the fugal style is to be seen in his superb "Damnation of Faust." In the tavern scene the drunken revelers sing a short and weakly constructed fugue, concerning which Mephisto remarks, "Here we find bestiality in all its frankness." As an antithesis to this, we have the criticism of the great contrapuntist and epic composer Handel, who said of the greatest dramatic composer of the day, "Gluck has no more counterpoint than my cook." There is room in the world, and wel-

come too, for the profundity of Bach, the grandeur of Handel, the noble tragedy of Gluck, and the fiery passion of Berlioz. It is puerile for a modern composer, who has inherited all the rich legacies slowly accumulated by his predecessors, to laugh at the productions of the simple toilers whose patient plodding made his riches possible.

The complete emancipation of harmony was the natural result of the establishment of the tempered scale. And the instrument which has contributed most to the discovery of new harmonic progressions is the piano. A good piano, well tuned on the principles of the tempered scale, offers an easy and delightful means of testing every conceivable chord. Théodore Dubois, late director of the Conservatoire Nationale de Musique of Paris, said that in his long experience as a teacher of harmony and musical composition he had found that those of his pupils who had learned the piano became masters of harmony more readily and thoroughly than those who learned the violin.

The most lovely human voice and the exquisite violins of Stradivarius and Guarnerius are impotent in harmony. They have contributed, and will continue to contribute, to the development of melody. The violin and the piano—one the most perfect in compass and modification of tone-color for the expression of melody, the other unlimited in its harmonic resources—mutually act on each other for the general good of music. The composer who writes for the orchestra carries about with him the harmonic instinct which the piano has fostered; and though his score is full of the richest and most elaborate harmony, the melodic nature of the stringed instruments curbs his exuberance of chord changes and prevents him from making his composition a restless and vague conglomeration of modulations, like a picture without a theme, a chaos of color.

The composer who best understood the nature of the piano, and who wrote for it in a manner most in accordance with its nature, was Chopin. In the works of this inspired Pole the student will find some of the most beautiful harmonies and melodies ever devised by the mind of man. These works, therefore, are excellent models for the student of harmony to analyze. And Edvard Grieg was one of the boldest harmonic innovators of recent times.

As in the past, so in the future will every composer of importance find in the limitless combinations of harmony a means of expressing his own personality. The best masters will never do entirely without counterpoint; nor did the best masters of the past ignore the musical beauty of harmony in their contrapuntal works. The counterpoint we employ to-day is not the colorless diatonic chant of the old Church modes. Its white light has been shattered into iris-hues by the prism of modern harmony. It is chromatic—that is to say, "colored"—so called because when its foreign sounds began to be heard in music, and the old notation had no signs to represent them, the notes to be raised or depressed a half tone were printed in red instead of the customary black.

Bach has not yet had a superior as a musical contrapuntist, and it will probably be a very long time before Wagner's amazing fertility in harmony is surpassed. The prelude to "Tristan und Isolde" alone contains more harmonies than can be found in two hundred years of Italian opera down to the death of Rossini. Can the grandeur and beauty of the harmonies of "Götterdämmerung" ever be excelled? But because Bach in counterpoint and Wagner in harmony seem to say "Thus far shalt thou go and no farther!" it by no means follows that the possibilities of music are exhausted. Tchaikovsky's "Pathetic" and Dvořák's "From the New World" symphonies are sufficient refutations in themselves of this charge.

Beethoven's treatment of a number of Scotch tunes is very unsatisfactory; yet Beethoven well knew the surprising and beautiful effect of harmonic changes, as many a page of his sonatas and symphonies will testify. Though composers of modern times are not limited to the few chords of the old contrapuntists, they frequently make use of a harmony as simple as that of their antecedents. In the beginning of "Das Rheingold" Wagner employs the chord of E flat for 136 bars without a break. This monotony, which is of course intentional, is quite different from the harmonic sameness that in the older works of any dimensions causes our interest to flag, and vitiates the masterly counterpoint.

The art of composing beautiful and striking harmony cannot be taught. It is the birthright of talent and genius, as is the gift of melody. The student with a natural aptitude for music, however, can best develop his harmonic instinct by repeatedly hearing the works of the great composers. The one remarkable genius on whom Nature lavished abilities approaching the combined powers of his predecessors was Richard Wagner. "Die Meistersinger" and "Der Ring des Nibelungen" are the epitome of the profundity, the grandeur, the noble tragedy, and the fiery passion of the best of Wagner's predecessors.

Along with the hearing of good music must go the careful study of it in detail, and a long practice of harmony exercises with a text-book and under the direction of a competent master. And the student must continue his studies notwithstanding the fact that he finds all the rules of his theory-book broken repeatedly by the great masters. Theory must forever lag behind the practice of the composers. The theorist can only classify and explain what the composer has done. He is not a creator, an inventor. The difficulties of producing a perfect theory of harmony are so great, unfortunately, that most theorists fill their pages with the rules of older theorists. Hence it is that the student of to-day has frequently to subject his practice to the rules established by the composers who wrote before the advent of the tempered scale.

The cry of "Rule-breaker!" "Outlaw!" has been hurled at Bach, Haydn, Beethoven, Wagner, Richard Strauss; and probably it will be heard as long as composers produce and theorists deduce. But the discipline of established rules has a very important bearing on the character of the future composer, when he is at liberty to roam at large in the free world of harmony. These rules will prove to be the rudder to his ship. His genius only sends the breeze that fills the sails. Without these rules he will be uncertain in his choice of harmonies. Without these rules he will be unable to defend himself or explain himself, when his procedure is called in question.

CHAPTER XI

THOROUGH-BASS

A Species of Musical Shorthand—Simple Method by which the Student may Either Read or Write Figured Bass—The Use of Lines in Organ-point—Knowledge Essential for Playing Handel and Bach.

THOROUGH-BASS is an instrumental bass part, continued, without interruption, throughout an entire piece of music, and accompanied by figures, indicating the general harmony.

In Italy, the figured bass has always been known as the basso continuo, of which term thorough-bass is properly regarded as a sufficiently correct translation. But in English usage the meaning of the term has been perverted, almost to the exclusion of its original intention. Because the figures placed under a thorough-bass could only be understood by a performer well acquainted with the rules of harmony, those rules were vulgarly described as the rules of thorough-bass; and now that the real thorough-bass is no longer in ordinary use the word survives as a synonym for harmony—and a very incorrect one.

The invention of this form of accompaniment was long ascribed to Lodovico Viadana (1566-1645), on the authority of Michael Prætorius, Johann Cruger, Walther, and other German historians of almost equal celebrity, fortified by some directions as to the manner of its performance, appended to Viadana's "Concerti ecclesiastici." But it is certain that the custom of indicating the intervals of a chord by means of figures placed above or below the bass note was introduced long before the publication of Viadana's directions, which first appeared in a reprint of the "Concerti" issued in 1612, and are not to be found in any earlier edition; while a true thorough-bass is given in Peri's "Euridice," performed and printed in 1600; an equally complete one in Cavalieri's "Rappresentazione di anima e di corpo," published in the same year; and another, in Caccini's "Nuove Musiche" (Venice, 1602). There is, indeed, every reason to believe that the invention of the continuo was synchronous with that of the monodic style, of which it was a necessary contingent; and that, like dramatic recitative, it owed its origin to the united efforts of the enthusiastic reformers who met, during the closing years of the sixteenth century, at Giovanni Bardi's house in Florence.

After the general establishment of the monodic school the thorough-bass became a necessary element in every composition written either for instruments alone or for voices with instrumental accompaniment. In the music of the eighteenth century it was scarcely ever wanting. In the operas of Handel, Bononcini, Hasse, and their contemporaries it played a most important part. No less prominent was its position in Handel's oratorios; and even in the minuets and gavottes played at Ranelagh it was equally indispensable. The "Vauxhall Songs" of Shield, Hook, and Dibdin were printed on two staves, on one of which was written the voice part, with the melody of the ritornelli inserted in single notes between the verses, while the other was reserved for the thorough-bass. In the comparatively complicated cathedral music of Croft, Greene, and Boyce the organ part was represented by a simple thorough-bass printed on a single stave beneath the vocal score. Not a chord was ever printed in full either for the organ or the harpsichord; for the most ordinary musician was expected to play at sight from the figured bass, just as the most ordinary singer in the days of Palestrina was expected to introduce the necessary accidental sharps and flats in accordance with the laws of cantus fictus.

The art of playing from a thorough-bass still survives, and even flourishes, among the best cathedral organists. James Turle and Sir John Goss played with infinitely greater effect from the old copies belonging to their cathedral libraries than from modern "arrangements" which left no room for the exercise of their skill. Of course, such copies can be used only by those who are intimately acquainted with all the laws of harmony; but the application of those laws to the figured bass is exceedingly simple, as we shall now proceed to show.

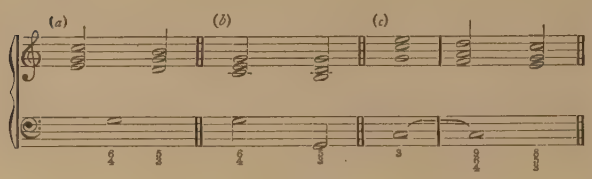
1. A wholesome rule forbids the insertion of any figure not absolutely necessary for the expression of the composer's intention.

2. Another enacts that in the absence of any special reason to the contrary the figures shall be written in their numerical order, the highest occupying the highest place. Thus, the full figuring of the chord of the seventh is, in all ordinary cases, $\frac{7}{5}_{3}$, the performer being left at liberty to play the chord in any position he may find most convenient. Should the composer write $\frac{3}{5}_{7}$, it will be understood that he has some particular reason for wishing the third to be placed at the top of the chord, the fifth below it, and the seventh next above the bass; and the performer must be careful to observe the directions implied in this departure from the general custom.

3. In conformity with Rule 1, it is understood that all bass notes unaccompanied by a figure are intended to bear common chords. It is only necessary to figure the common chord when it follows some other harmony on the same bass note. Thus, at (*a*), in Example I, unless the common chord were figured, the $\frac{6}{4}$ would be continued throughout the bar, and in this case two figures are necessary for the common chord, because the sixth descends to a fifth and the fourth to a third. At (*b*) two figures are equally necessary, otherwise the performer would be perfectly justified in accompanying the lower G with the same chord as the upper one. In-

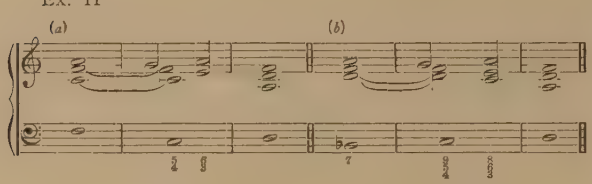
stances may even occur in which three figures are needed, as at (*c*), where it is necessary to show that the ninth, in the second chord, descends to an eighth, in the third. But in most ordinary cases, a 3, a 5, or an 8 will be quite sufficient to indicate the composer's intention.

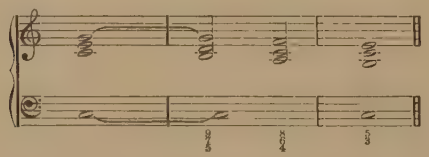
Ex. I



The first inversion of the triad is almost always sufficiently indicated by the figure 6, the addition of the third being taken as a matter of course, though cases will sometimes occur in which a fuller formula is necessary, as at (*a*), in Example II, where the 3 is needed to show the resolution of the fourth in the preceding harmony, and at (*b*), where the 8 indicates the resolution of the ninth and the 3 that of the fourth.

Figure 6 indicates, in all cases, the first inversion of the triad, and nothing else; and, were any such change now introduced, we should need one code of laws for the interpretation of old thorough-basses and another for those of later date.

Ex. II

The second inversion of the triad cannot be indicated by less than two figures, $\frac{6}{4}$. Cases may even occur in which the addition of an 8 is needed, as, for instance, in the organ-point at (*a*) in Example III; but these are rare.

Ex. III

In nearly all ordinary cases the figure 7 only is needed for the chord of the seventh, the addition of the third and fifth being taken for granted. Should the seventh be accompanied by any intervals other than the third, fifth, and octave, it is of course necessary to specify them. Instances analogous to those we have already exemplified when treating of the common chord will sometimes demand even the insertion of a 3 or a 5, when the chord follows some other harmony on the same bass note. Such cases are very common in organ-points.

The inversions of the seventh are usually indicated by the formulæ $\frac{6}{5}$, $\frac{4}{3}$, and $\frac{4}{2}$, the intervals needed for the completion of the harmony being understood. Sometimes, but not very often, it will be necessary to write $\frac{6}{5}_{3}$, $\frac{6}{4}_{3}$, or $\frac{6}{4}_{2}$. In some rare cases the third inversion is indicated by a simple 4; but this is a dangerous form of abbreviation, unless the sense of the passage is very clear, since the figure 4 is constantly used, as we shall presently see, to indicate another form of dissonance. The figure 2, used alone, is more common, and always perfectly intelligible, the 6 and the 4 being understood.

The figures $\frac{9}{7}$, whether placed under the dominant or under any other degree of the scale, indicate a chord of the ninth, taken by direct percussion. Should the ninth be accompanied by other intervals than the seventh, fifth, or third, such intervals must be separately noticed. Should it appear in the form of a suspension, its figuring will be subject to certain modifications, of which we shall speak more particularly when describing the figuring of suspensions generally.

The formulæ $\frac{7}{4}_{2}$ and $\frac{9}{7}_{4}$ are used to denote the chord of the eleventh—i.e., the chord of the dominant seventh, taken upon the tonic bass. The chord of the thirteenth—or chord of the dominant ninth upon the tonic bass—is represented by $\frac{7}{6}_{4}$ or $\frac{9}{7}_{6}^{4}$ or $\frac{7}{6}_{4}^{2}$. In these cases the 4 represents the eleventh and the 6 the thirteenth; for it is a rule with modern composers to use no higher numeral than 9, though in the older figured basses—such as those given in Peri's "Euridice," and Cavalieri's "Rappresentazione di anima e di corpo"—the numerals 10, 11, 12, 13, and 14 are constantly used to indicate reduplications of the third, fourth, fifth, sixth, and seventh in the octave above.

Accidental sharps, flats, and naturals are expressed in three different ways. A ♯, ♭, or ♮, used alone—that is to say, without the insertion of a numeral *on its own level*—indicates that the third of the chord is to be raised or depressed a semitone, as the case may be. This arrangement is entirely independent of other numerals placed *above* or *below* the accidental sign, since these can only refer to other intervals in the chord. Thus, a bass note with a single ♭ beneath it must be accompanied by a common chord with a flattened third. One marked $\frac{6}{♭}$ must be accompanied by the first inversion of the chord of the seventh, with its third flattened. It is true that in some thorough-basses of the eighteenth century we find the forms ♯3, ♭3, or ♮3, but the figure is not really necessary.

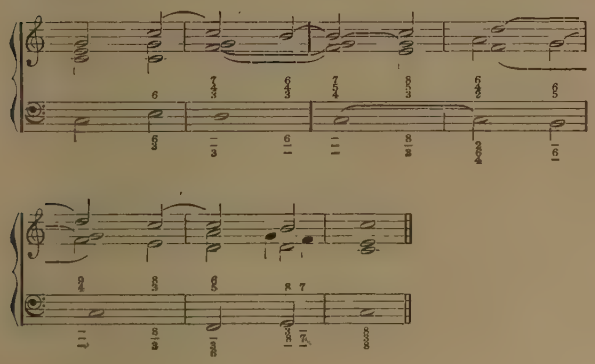
A dash drawn through a 6 or 4 indicates that the sixth or fourth above the bass note must be raised a semitone. In some of Handel's thorough-basses the raised fifth is indicated by 5, but this form is not now in use.

In all cases except those already mentioned the necessary accidental sign must be placed before the numeral to which it is intended that it should apply; as ♭6, ♯7, ♮5, ♭9, ♭4, ♮4, ♮6, etc.; or, when two or more intervals are to be altered, $\frac{♭6}{♭4}$, $\frac{♭6}{♭}$, $\frac{♭7}{♭5}$, etc.; the figure 3 being always suppressed in modern thorough-basses, and the accidental sign alone inserted in its place when the third of the chord is to be altered.

By means of these formulæ, the chord of the augmented sixth is easily expressed either in its Italian, French, or German forms. For instance, with the signature of G major, and E♭ for a bass note, the Italian sixth would be indicated by 6, the French by $\frac{6}{4}$, the German by $\frac{6}{3}$, or $\frac{6}{5}$.

The employment of passing notes, appoggiaturas, suspensions, organ-points, and other passages of like character gives rise sometimes to very complicated figuring, which, however, may be simplified by means of certain formulæ that save much trouble both to the composer and the accompanist.

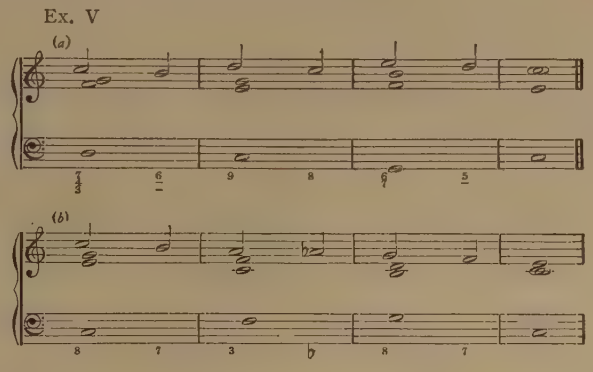
A horizontal line following a figure, on the same level, indicates that the note to which the previous figure refers is to be continued in one of the upper parts over the new bass note, whatever may be the harmony to which its retention gives rise. Two or more such lines indicate that two or more notes are to be so continued, and in this manner an entire chord may frequently be expressed without the employment of a new figure. This expedient is especially useful in the case of suspensions, as in Example IV, the full figuring of which is shown above the continuo, and beneath it the more simple form, abbreviated by means of the horizontal lines, the arrangement of which has in some places involved a departure from the numerical order of the figures.

Ex. IV

Any series of suspended dissonances may be expressed on this principle—purposely exaggerated in the example—though certain very common suspensions are denoted by special formulæ which seldom vary. For instance, 4 3 is always understood to mean $\frac{5}{4}\ \frac{5}{3}$ —the common chord, with its third delayed by a suspended fourth—in contradistinction to $\frac{6}{4}\ \frac{5}{3}$ already mentioned; 9 8 means the suspended ninth resolving into the octave of the common chord; $\frac{9}{4}\ \frac{8}{3}$ indicates the double suspension of the ninth and fourth, resolving into the octave and third; etc.

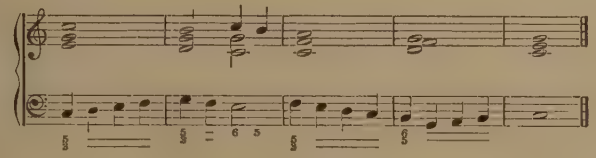
In the case of appoggiaturas the horizontal lines are useful only in the parts which accompany the discord. In the part which actually contains the appoggiatura the absence of the concord of preparation renders them inadmissible, as at (*a*) in Example V.

Passing notes in the upper parts are not often noticed in the figuring, since it is rarely necessary that they should be introduced into the organ or harpsichord accompaniment; unless, indeed, they should be very slow, in which case they are easily figured in the manner shown at (*b*) in Example V.

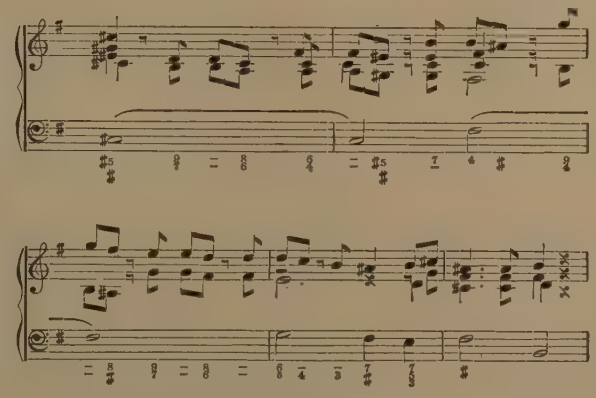
Ex. V



The case of passing notes in the bass is very different. They appear, of course, in the continuo itself. The fact that they really are passing notes, and therefore are not intended to bear independent harmonies, is sufficiently proved by a system of horizontal lines indicating the continuance of a chord previously figured; as in Example VI, in the first three bars of which the triad is figured in full because its intervals are continued on the three succeeding bass notes.

Ex. VI

But in no case is the employment of horizontal lines more useful than in that of the organ-point, which it would often be very difficult to express clearly without their aid. Example VII shows the most convenient way of figuring complicated suspensions upon a sustained bass note.

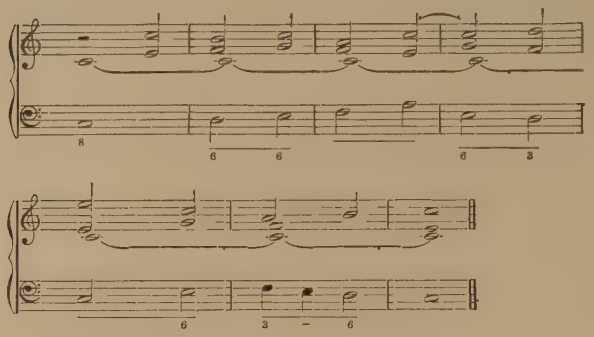
Ex. VII HANDEL



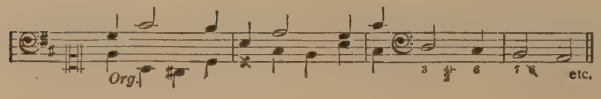
In the inverted pedal-point the lines are still more valuable as a means of indicating the continuance of the sustained note in an upper part; as in Example VIII,

in which the figure 8 marks the beginning of the C, which, sustained in the tenor part, forms the inverted pedal, while the horizontal line indicates its continuance to the end of the passage.

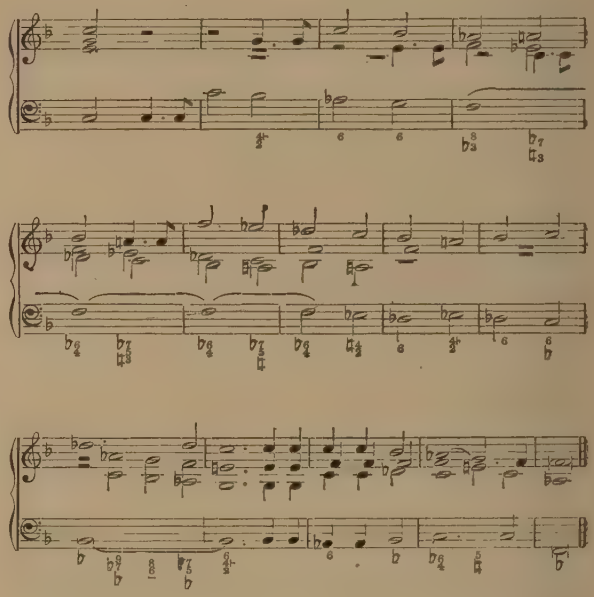
Ex. VIII



When, in the course of a complicated movement, it becomes necessary to indicate that a certain phrase—such as the well-known canto fermo in the "Hallelujah Chorus"—is to be delivered in unison, or at most only doubled in the octave, the passage is marked *tasto solo,* or T. S.—i.e., "with a single touch" (= key). When the subject of a fugue appears for the first time in the bass, this sign is indispensable. When it first appears in an upper part, the bass clef gives place to the treble, soprano, alto, or tenor, as the case may be, and the passage is written in single notes, exactly as it is to be played. In both these cases it is usual also to insert the first few notes of the answer as a guide to the accompanist, who only begins to introduce full chords when the figures are resumed. In any case, when the bass voices are silent the lowest of the upper parts is given in the thorough-bass, either with or without figures, in accordance with the law which regards the lowest sound as the real bass of the harmony, even though it may be sung by a soprano voice. An instance of this kind is shown in Example IX.

Ex. IX HANDEL

We shall now present a general example, serving as a practical application of the rules we have collected together for the reader's guidance, selecting for this purpose the concluding bars of the chorus "All we like sheep," from Handel's "Messiah."

Ex. X HANDEL



The figuring here given contains nothing which the modern professor of harmony can safely neglect to teach his pupils. The misfortune is that pupils are too often satisfied with *writing* their exercises, and too seldom expected to *play* from a thorough-bass at sight. Many young students could write the figured chords correctly enough, but few care to acquire sufficient fluency of reading and execution to enable them to accompany a continuo effectively, though this power is indispensable to the correct rendering, not only of the works of Handel and Bach, but even of the oratorios and masses of Haydn and Mozart, the latest great works in which the organ part is written on a single stave.

CHAPTER XII

COUNTERPOINT

Origin—Organum and Faburden—Bach—Trend of Modern Music—The Obbligato—Bad Effect of Too Much Complexity—Species of Counterpoint—Modern Examples of Counterpoint—Old Church Composers—English Composers—Croft—Necessity for Breadth of Culture.

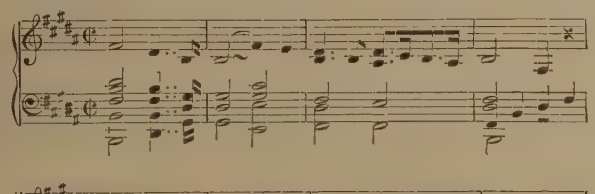
WHERE and when counterpoint began are matters of conjecture. It is unimportant, however, though the fancy likes to picture a romantic origin for art-forms. We are willing to accept the guesses of the historians quoted by Naumann that Paris was the cradle of counterpoint. Certain it is that when the organum and the faburden, the harbingers of counterpoint, first made themselves felt in the musical world, Paris was the center of European culture. Here, then, on the banks of the Seine, let us date the birth of counterpoint a thousand years ago.

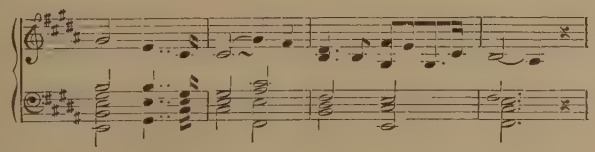
In the year 1750 Johann Sebastian Bach, by whom all the science and art of his predecessors was carried to incomparable heights, passed from earth. Since Bach's day counterpoint has abdicated the throne and is now only a citizen in the democracy of music. Melody, harmony, dynamic effects, variety of rhythms, orchestral color, have more to do with the nature of modern music than counterpoint has. The archaic counterpoint of early days was uninfluenced by the harmonies that the tempered scale has made possible. It lacks color and passion. It is the child of the cold gray stone cathedral, and needs the echoes of the high-arched roof, the shadowy distance of the long-drawn aisle, the Latin liturgy—everything, in fact, that tends to separate the humble devotee from the sanctity of the priest. The trend of music has ever been toward expression; it no longer separates. The music we esteem to-day is that which makes the most direct appeal to our emotions. From this modern art counterpoint is not excluded, but it is not the counterpoint of our forefathers that composers now employ.

Counterpoint is the art of combining two or more melodies (or themes, phrases). Whenever the accompaniments of a melody are so constructed that they stand out clear and distinct from the melody as independent melodies themselves, the effect is contrapuntal to the hearer. A familiar use of free counterpoint is in an obbligato to a song. Some of the finest counterpoint, however, is so smoothly written and of such complexity that the ordinary uncultured ear cannot distinguish any theme or sense in such a babel of conflicting voices, each one clamoring for the attention. To an uneducated ear the melodic, harmonic, and emotional beauty of Bach's unapproachably perfect fugue in C sharp minor, No. 4 of the "48," is lost in the maze of the five-voiced counterpoint. The simplest song or dance in balanced four-bar phrases seems richer in melody.

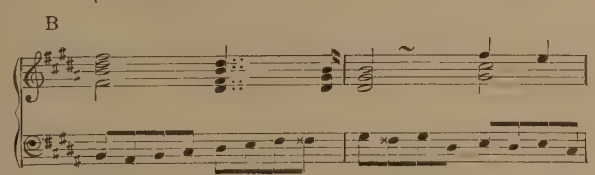
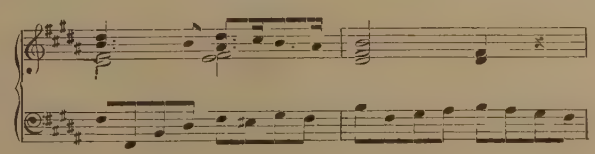
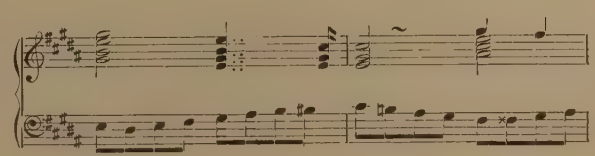
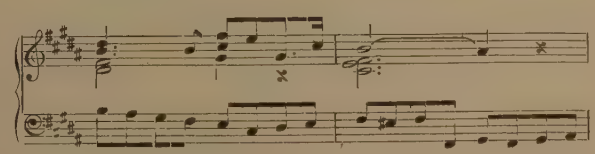
It does not require much attention for the listener to notice that when Wagner, in the second half of the "Tannhäuser" march, repeats the principal theme of the first part he elaborates the bass, giving it a melodic importance that it did not have in the first part. In the first part the bass is only an unobtrusive part of the harmonies that accompany the all-important melody. In the second part the shorter note-value and the continuity of the melodic flow of notes in the bass make the bass almost equal in importance to the theme. In other words, the bass in the second part is a counterpoint to the melody; the bass is contrapuntal. The example A shows the first two phrases that together make half of the first sentence of this march. B is the same half-sentence with the contrapuntal bass.

A





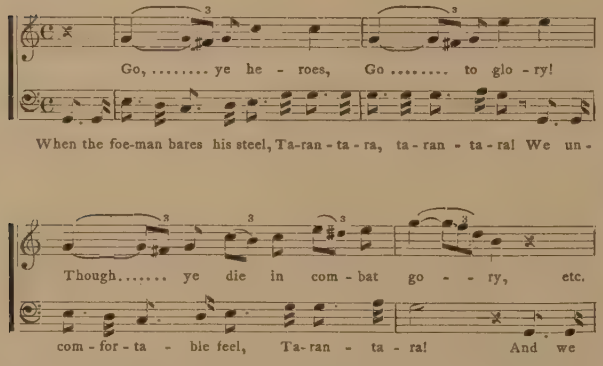
B



There are several species of counterpoint classified in treatises. As exercises, the systematic study of these species is of value, but the only counterpoint that modern composers make any extensive use of is the species known as florid counterpoint. This species of counterpoint is easily distinguishable by its notes of unequal length, by tied and dotted notes, and by rests. The counterpoint in the "Tannhäuser" example B is not florid; it is of the third species. Space forbids an explanation of the five species of counterpoint, of which florid is the last. A treatise on counterpoint would fill a large volume. Nothing but the briefest description of what counterpoint is can be outlined here.

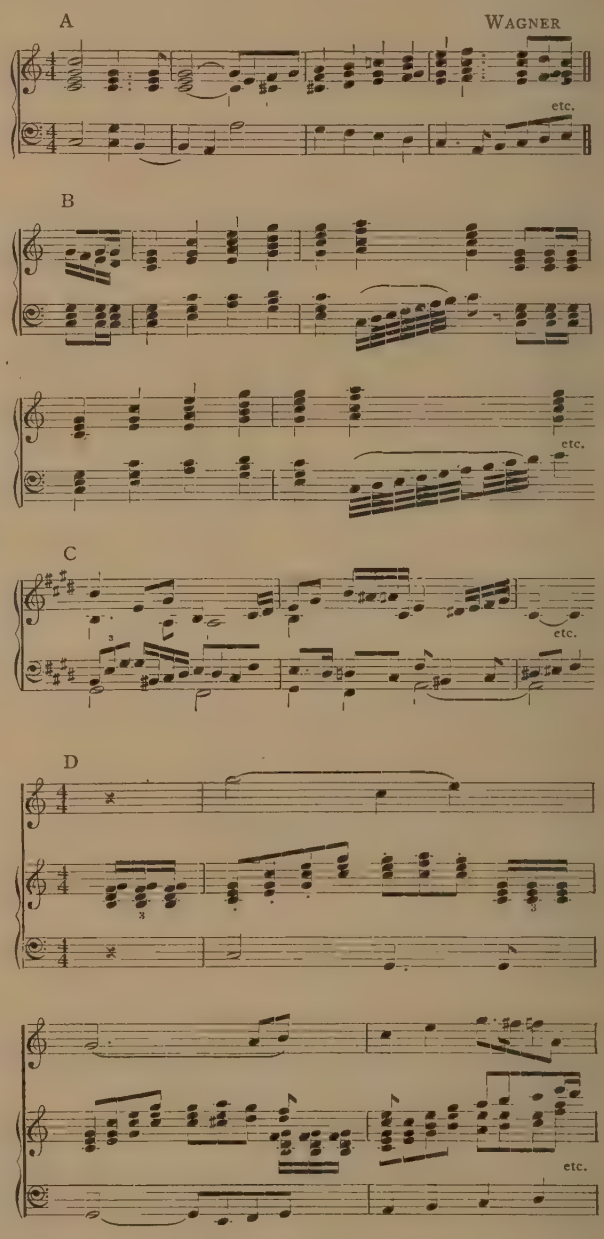
In addition to this simple counterpoint, of which all the examples quoted in this chapter are instances, there is also double counterpoint. Double counterpoint is the art of so constructing a contrapuntal passage that it can be sounded either over or under the theme it is intended to accompany. The art of double counterpoint has fallen into disuse in these days of harmony and orchestral color. Not only in the works of Bach, but in almost all fugues, double counterpoint is more or less in evidence. In the fugue in Cherubini's requiem mass in C minor we find an excellent example of triple counterpoint. The three themes are so constructed that each one in turn may appear above, below, or between the other two.

Sir Arthur Seymour Sullivan sometimes lent considerable zest to the movements in his humorous operettas by causing two themes which had previously been heard separately to be heard together. An amusing instance of this procedure is to be found in the third number of the second act of "The Pirates of Penzance." The Sergeant's song "When the foeman bares his steel" is followed by Mabel's solo "Go, ye heroes, go to glory." Later on in the same scene the two melodies are combined thus:


Go, ... ye he - roes, Go ..... to glo - ry!
When the foe-man bares his steel, Ta-ran - ta - ra, ta - ran - ta - ra! We un -
Though..... ye die in com - bat go - - ry, etc.
com - for - ta - ble feel, Ta - ran - ta - ra! And we

With an orchestral accompaniment and a chorus of girls this counterpoint is very effective on the stage. Sullivan employs this same contrapuntal device in the chorus "Now glory to the God who breaks," in "The Martyr of Antioch." In both these examples the composer has been careful to give each theme a characteristic and contrasting rhythm. The triplets of Mabel's song are easily distinguishable from the angular rhythm of the Sergeant's phrases. Sullivan had too fine a sense of the fitness of things to employ any but the least complex counterpoint in his sparkling operettas.

In the overture to "Die Meistersinger" Wagner has most felicitously combined three themes that have each been treated separately before they are heard simultaneously. This is one of the finest specimens of modern counterpoint extant. Examples A, B, and C are the first few bars of the themes which are afterward so skillfully and delightfully combined in example D.



This complexity is not difficult to follow when the themes are known. The theme C, in notes of double length, is the upper melody, and is therefore the easi-

EUGEN D'ALBERT

TERESA CARREÑO

XAVER SCHARWENKA

VLAIDIMIR DE PACHMANN

JOSEF HOFMANN

MORITZ ROSENTHAL

IGNACE PADEREWSKI

WILLIAM H. SHERWOOD

FANNIE BLOOMFIELD-ZEISLER

HAROLD BAUER

EMIL SAUER

OSSIP GABRILOWITSCH

est to be distinguished. The theme A is in the bass, which is the next easiest part for the ear to hear; while theme B is ingeniously written in notes of half the time-value of those that first announced it, giving it a rhythmical contrast to the themes A and C.

The old Church composers of the eighteenth century thought less about clarity. They wrote for a public familiar with contrapuntal devices, and they frequently let ingenuity outstrip inspiration. Much of their eight-part counterpoint is so closely interwoven that the ear cannot follow the melody of each voice. Too great a complexity defeats its own ends. At a distance from the eye a fine piece of silk looks less complicated than a few twisted strands of rope. And Wagner's comparatively simple combination of three themes sounds richer and more complex than that music which is composed of a very great number of themes so closely fitted that the ear cannot separate one from the other.

But it must never be forgotten when judging, and possibly condemning, the old Church composers that they were invariably imbued with a progressive spirit, and that they made use of the utmost resources of the imperfectly developed art of their day. In Thomas Tallis and William Byrd the old English polyphonic school had two great masters of the art second only to the Italian Palestrina. Those two contrapuntists were neither equaled by any German of their times nor surpassed by the Netherlanders. The influence of Tallis was so great that when he, by way of experiment or for the sake of variety, composed a simple service in a Doric mode, his followers accepted this as a model for Church services. And so it came to pass that for a long time the English Church service was most orthodoxly dull and gloomy. Orlando Gibbons restored the polyphonic style to the service, and made it bright and melodious. Purcell, probably the greatest musical genius of whom England can boast, was somewhat under the French influence in his services. His greatness must be sought in those forms which allow freer play of imagination and dramatic expression.

Unquestionably the finest examples of the English Church service date from the beginning of the eighteenth century. In 1727, exactly one hundred years before the death of Beethoven, Westminster Abbey received the ashes of William Croft. Croft could not soar among the stars with Beethoven, but nevertheless he wrote the finest Te Deum and Jubilate to be found in the English service. In these, and in his anthems "Cry aloud and shout" and "God is gone up with a merry noise"—to mention only two of his many excellent choral works—we find masterly workmanship, fine feeling, and a breadth and power exactly proportioned to the form and dimension of the work. The successors of Croft have been too frequently orthodox and conservative. Like the followers of Tallis, they heed the manner of the past, and do not attempt to enrich the service from the new resources of music. There are notable exceptions, though many of these exceptions are weakly sentimental, rather than strongly modern.

Schumann is credited with saying that his development began when he got it into his head that there were other countries than Germany in the world. And it is doubtless good for a little man from Ulm, Rouen, or Durham, when expatiating in the turmoil of Chicago on the glories of his cathedral music, to be shocked with the question, "Where is Durham?" There are other worlds of music than the one in which we move. Explore them. It cannot be denied that much of the old music is too contrapuntal. Counterpoint had then but recently reached maturity, and composers reveled in their new-found art. The melodic school of Italy neglected everything for the sake of pretty tunes. When the sonata form was new, Mozart put many compositions on paper that are only of the slightest musical value except as excellent examples of balanced sonata form. When the history of our times is written, it will be stated that the composers of the latter part of the nineteenth and the early part of the twenieth centuries too frequently neglected balance of form, contrapuntal skill, and thematic development for the sensuous charm of rich harmonies and brilliant orchestration.

Counterpoint will always keep its place as one of the most important factors in the upbuilding of a great musical work, but it is improbable that it will ever regain the position of supreme importance which it held in the eighteenth century.

CHAPTER XIII

IMITATION, CANON, AND FUGUE

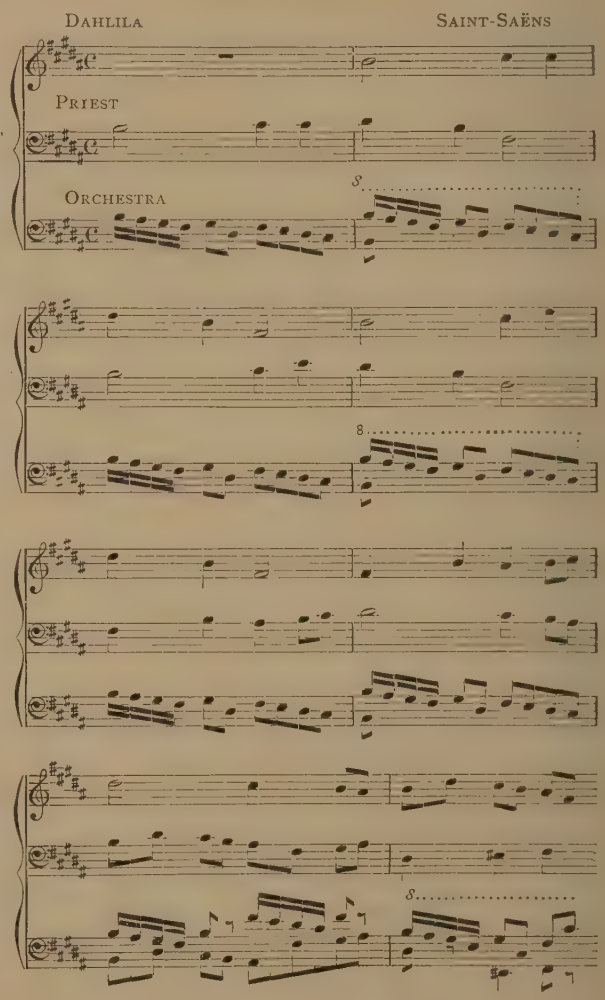
Composers of the Contrapuntal Epoch—Too Great Attention to External Merit—Subjective and Objective—Glareanus—Palestrina to Handel—Imitation and Imitative Passages—Canons—The Flower of Counterpoint is Fugue—Fugal Style and Structure—Fugue and Cadences—Bach's Violin Sonatas—His Organ Fugues—Mozart's Wonderful Skill—Modern Oratorio and Fugue—The Fugue and Modern Expression.

THE academical spirit of the eighteenth century in letters was tersely expressed by Voltaire in his strictures on the blank verse of Shakespeare: "If you remove the labor, you remove the merit." The composers of the contrapuntal epoch in music were imbued with the same esteem for the external signs of workmanship. Now these external merits are but the trappings and the jewels of the spirit of the poem or the song. The music of Dante's marvelous three-rhymed "Divine Comedy" is the sweeter for the cadence of its rhyme, but Dante's crown of unfading glory rests on a firmer foundation than the jingle of his lines. Bach's fugues are also marvels of constructive skill, though the amazing complexity of the forgotten mathematics in sound of the Netherland composers would oust them from their foremost rank if external labor were the touchstone of merit. The purity of style and perfect rhymes of Voltaire's plays have not prevented this wittiest of authors from ignominious neglect by the world of playgoers. Rhyme in poetry and form in music are largely products of the objective factor in the brain; that is to say, the intellectual faculties, which faculties can be directed by the will. The character, spirit, soul—call it what you will; it is usually called the inspiration of the poem or the composition—is the product of the subjective factor of the brain. This subjective factor is not under the control of the will.

Among the old contrapuntists the intellectual factor often seriously interferes with the suggestive factor. Henricus Glareanus, in his "Dodekachordon," published in 1547, tells us that it required two men to compose a piece of music—one to invent the tune, and another to write the counterpoint. It is evident that the objective and subjective were not combined in the mind of any composer with whom Glareanus was acquainted. Yet the old author was shrewd enough to say that it might be possible to combine the two functions of melodist and contrapuntist in one person.

In 1547 Palestrina was a young student in Rome; in 1658 Purcell was born in London; in 1685, within a few days and a few miles of each other, Bach and Handel were born in Saxony. The speculative theory of Glareanus was not rash, though it may have been novel in his day. Palestrina, Purcell, Bach, and Handel, and a hundred excellent composers, from the birth of Palestrina to the death of Handel, are irrefutable evidence that the functions of melodist and contrapuntist can be combined in the selfsame mind.

One of the earliest forms of contrapuntal ingenuity is imitation. Imitation is a term that is not very precise in its definition. Sometimes only the rhythm is imitated, and frequently the imitating melody varies considerably from the part imitated. If the imitation is note for note the same as the melody it is called a canon. The subjoined example is a canon in the octave:

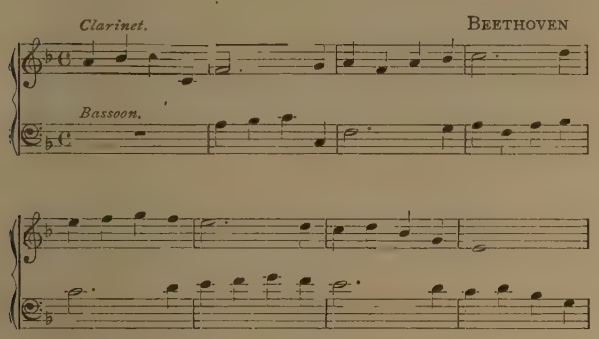


Canons can be written with the imitating part beginning at any interval from the melody as well as from the octave. The imitating part will then not be note

for note as the melody, as it is in canons in the octave and the unison. If the canon or the imitation is in the tenth, for instance, every note of the imitating part will lie a tenth above the notes of the melody that are being imitated. It is usual to reckon intervals upward. This will explain why a canon that begins on G, with the imitating part starting on the E under the G, is called a canon in the sixth. Not all contrapuntists follow this nomenclature, however. In the ascending scale E is a sixth above G, therefore it is called by many a canon in the sixth.

There are also canons in several voices; canons on several subjects; canons in which the imitating part is inverted—that is to say, upside down; canons in which the imitating part is in notes of shorter or longer time-value than the notes of the leading melody. In fact, there seems to be no end to the mathematical possibilities of imitation. The reason why it is now dead as an art-form is that it makes such a great demand on the ordinary intellectual faculties of the brain that the more sensitive and rarer subconscious factor is overwhelmed and silenced. The bright lance of inspiration is shattered by the leaden mace of reflection.

Here and there in the works of modern composers are to be found musical examples of imitative passages. The seventh number of Sir Alexander C. Mackenzie's "Jason" contains a melodious vocal canon; Schumann's "Études symphoniques" for piano abound in imitative passages. One of the most genial of the many sportive, half-humorous pages that Beethoven wrote is the imitation in the octave between the clarinet and bassoon in the first movement of the Fourth symphony:



This is strict imitation, and is therefore a canon of eight bars' length. The last movement of César Franck's sonata in A for piano and violin is one of the most beautiful imitative movements in existence.

Bach, of course, did everything. In his "Goldberg" variations there are canons in the unison, second, third, fourth, fifth, sixth, seventh, octave, and ninth. Of these the example in the interval of the fifth is in contrary motion. These canons are not haunting in their emotional beauty. The subjective factor in Bach's brain was recuperating for the creation of one of his profoundly felt and tenderly expressive choral masterpieces when his incessantly active mind vented its energy in these constructive problems.

The seeker for external perfection of canonic skill is referred to the masterly feat of August A. Klengel, whose forty-eight canons and fugues in all keys are monuments of patient thought and elaboration

Counterpoint is the plant of which fugue is the flower in its full perfection. Counterpoint can go no farther than the production of a fine fugue. The fugue contains simple and double counterpoint, imitation, canon, as well as its own characteristic form. A fugue is a composition in which a certain phrase called the subject is announced and discussed by a number of voices in turn, separately and simultaneously, according to the elaborate but not rigid rules of fugue.

In a typical fugue we might have a construction in which the exposition is made thus: A short characteristic phrase is announced by the soprano part in the tonic; the alto gives the answer, which consists of the subject in the dominant instead of in the tonic. The tenor now announces the subject again in the tonic, and is followed by the bass with the answer in the dominant. The soprano, alto, and tenor having entered in turn with the characteristic phrase, continue with free counterpoint until the end of the subject in the bass. When the bass enters there will therefore be four voices sounding at once, each one with an independent counterpoint.

At the end of this exposition there will be an episode, which is a passage of a few bars wherein the subject is absent. Episodes usually contain phrases that resemble parts of the exposition, though the subject itself is omitted. During this episode, and during the counter-exposition which follows it, one or more of the four voices, either instrumental or vocal, will become silent. This allows the voice that has dropped out to enter with effect when it is its turn to state the subject or answer in the counter-exposition. In the counter-exposition the composer contrives that the voices enter in a different order than in the exposition. The voices that had the subject in the first part will now have the answer in the second part. At the end of the counter-exposition there is a longer episode, followed by a free treatment of the subject as the fancy of the composer suggests. Other keys than the tonic and dominant are here introduced, and the subject is heard in its entirety or in fragments with new harmonic accompaniments, inverted, augmented, and diminished. The remainder of the fugue consists of the strettos and various episodes. In the strettos the subject is treated to canonic imitation which brings the entry of the imitating voice each time nearer the imitated notes of the subject.

Few fugues contain all these treatments. Some fugues have no counter-exposition, some have no stretto. Some fugues have more than one subject; some have a counter-subject which accompanies the subject every time it appears.

The fugue avoids full cadences. If one should appear, the subject will enter at the same time and continue the movement. It is not difficult to distinguish a fugue from a canon. In a canon every note in the leading voice is imitated by every note in the imitation that follows it like a slanting shadow to the end. In a fugue a short subject is heard here and there in a number of voices that make no attempt to imitate each other.

Bach was the greatest scientist, as well as the great-

est artist in fugues, that the world has yet seen. He bound himself in the most unyielding of fetters and moved with the freedom of an acrobat.

For the solo violin, with its exceedingly narrow limits of harmony and double notes, he wrote fugues, preludes, chaconnes, with a rhapsodical fire and brilliancy that compel the applause of the concert-room to-day when the master of the violin appears who can do them justice. The stiff forms are masked in ornament, like steel armor damaskeened in purple and gold. The first of organists in his day, and the acknowledged king of all contemporary and subsequent composers for his favorite instrument, he has bequeathed to the world such a legacy of organ fugues that the musician hardly knows whether the quantity or the quality is the more amazing.

With every decade greater organs are constructed. But the mightiest organ has not yet found the limit to the breadth and grandeur of Bach's organ fugues. For the clavier, which had its exit with the entrance of the modern piano, Bach was lavish of all kinds of fugues. His "Art of Fugue," a book written to show what can be done with a theme, is unquestionably dry and technical. In the famous "Well-tempered Clavichord," which Bach wrote to help forward the then imperfectly understood equal temperament, he presented some of the most beautiful of his musical utterances. Humor, pathos, dignity, and power are all to be found in these unapproached and unapproachable fugues. They are like the wild flowers that spring from the arid soil of the stony wayside. The vine and tendril and bloom of melody clasp and cloak the gnarled trunk of counterpoint.

Among all the singers, romancers, colorists, and wooers of Penelope to-day there are none who can bend the contrapuntal bow of this Ulysses of music.

Mozart has deftly combined the fugue and the sonata forms in his overture to "The Magic Flute," and in the last movement of the great C major symphony, which his contemporary admirers surnamed "The Jupiter." With such remarkable skill are these two forms welded that it would be impossible to find the seam if the cadences of the sonata form did not interrupt the flight of the fugue. They resemble the architecture of the Incas, of which Prescott tells us that the stones were so neatly fitted that the eye might not detect the joint if the fluting was removed.

The fugue has not been modernized. It is difficult to introduce it in modern works without a glaring mixture of old and new styles. The fugue at the end of Beethoven's "Mount of Olives" is less inspired than the majestic "Halleujah" chorus which precedes it. It is more formal and old-fashioned in style, and is a labored product of the intellectual faculties, rather than a spontaneous creation of Beethoven's genius. Thirty-two years after the production of "The Mount of Olives," the most popular, and most dramatic oratorio since the days of Bach and Handel, Mendelssohn's "Elijah," was given to the world. Mendelssohn, in his instrumental pieces, has caught a good deal of the infection of Weber's romantic spirit. In his choral works the influence of the older classical composers is more noticeable. The fugue had long ceased to be an essential feature in instrumental compositions, though Church music and those choral works which are founded on Biblical stories remained, and still remain, far behind instrumental works in modernity of style. Yet the fugal style plays a very subordinate part in the "Elijah."

Twenty-two years after "Elijah" was first given Wagner produced his "Meistersinger." The introduction to the third act of this most perfect and magnificent of all comedy operas may some day be referred to by the future historian as the germ of the fugue renaissance. The theme that begins the introduction—a phrase that could do admirably for a fugue subject—is taken up in turn by four voices—instrumental voices—as in the exposition of a fugue. The difference is in the keys in which the voices enter, and in the richness of the modern harmonies which these combined voices produce.

A fugue containing all the interesting devices of structure of the classical fugue combined with modern harmony, and expressing the emotion of the romantic spirit in music has not yet appeared. Wagner's poetical reverie is not a fugue. And the fugues of Wagner's contemporary Joseph Rheinberger are modern only because they are new.

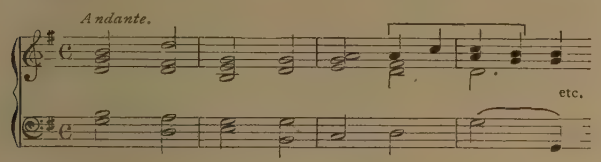
CHAPTER XIV

CADENCES

Various Ways of Ending—Harmonic Progression—Proportion and Balance—Function of Cadences—Untrained Ear Unreliable—Perfect and Plagal Cadences—Imperfect Cadence—Modern Methods—Berlioz and Richard Strauss—Variety in Cadence.

CADENCE in music means an end. In music, as in poetry, there are various ways of ending. It stands to reason that it is impossible to classify every harmonic progression that will serve as a cadence. Each composer tries to get a new ending for his phrases, sentences, and compositions. Even if it were possible to invent new harmonic progressions on every occasion, cadences would still resolve themselves into two distinct classes, those which are completely satisfactory as ends, and those which require a continuation of the musical phrase to finish the sentence.

Those cadences which are *final* should be called perfect, though the name perfect is usually applied to a certain fixed progression that is not always a final cadence. Those cadences which demand a continuation should be called imperfect. An ending that is final in one place may be only a momentary pause in another environment. In the following hymn from Gluck's "Iphigénie en Tauride" a perfect or full cadence is to be found at the beginning of the fourth measure:



This phrase is not satisfactory alone, even with the perfect end. The reason is that the musical idea is not completed. If we take Poe's line—

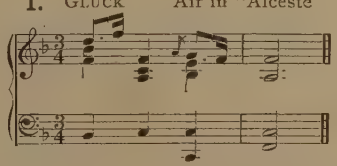
Ah, distinctly I remember, it was in the bleak December,

we have a sentence containing a definite idea. Yet this sentence, though capable of being parsed, is hardly more satisfactory than the hymn. In both instances we expect more; our sense of proportion and balance is not contented. One line of a poem and one phrase of a composition may be interesting as studies, as a foot and a hand are to draughtsmen, but a work of art must present the unmutilated figure in its perfection.

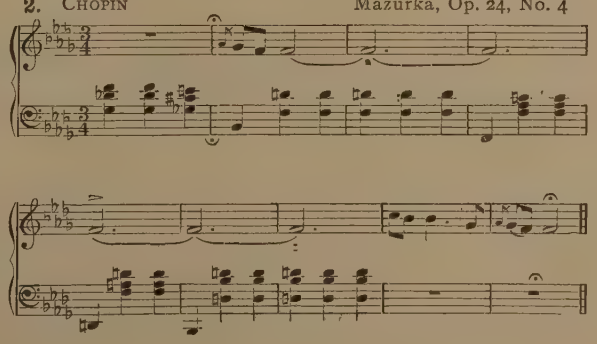
Now the function of cadences is to indicate the ends of the sections or phrases of which a musical sentence is made. When the requisite number of phrases have been put together, and the judgment of the composer tells him it is time to stop, there are many ways of ending. As no composer has yet found an agreeable way of finishing with a chord that is not a tonic chord for the time being, it has become a rule that a final cadence must end with the chord of the tonic in its root position. As by far the greater number of final cadences in all musical works consist of a tonic chord preceded by a chord of the dominant, it has come to pass that a cadence consisting of a chord of the dominant followed by a chord of the tonic in its root position is called a perfect or full cadence. Examples can be found in the works of the great composers of this perfect cadence on every beat or accent of the measure. Instinct is the only rule that has told them when and where the end should be. Everything is regular, and nothing is wrong that sounds right. It cannot be too emphatically stated, however, that the untrained ear of the tyro is an altogether unreliable guide. An effect is unquestionably good if the wonderfully fine ear of a great composer sanctions it. But the beginner may be pleased with trite and vapid progressions that are detestable to the mind that has experienced "an unfolding of musical faculty." Zeal and judgment are often antagonistic. Zeal for judgment is the only means the composer has to develop an unerring instinct for cadences.

The following final cadences differ from each other in every respect except that they all end with the tonic chord in the root position. The first one has been adopted unaltered in melody by Mozart in numberless instances, as well as in the harmonic progression which is common property.

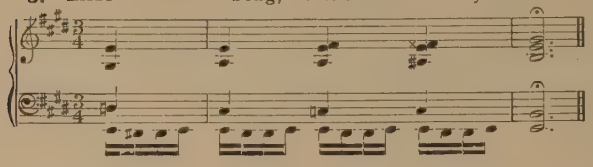
1. GLUCK Air in "Alceste"



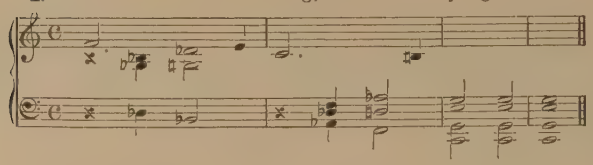
2. CHOPIN Mazurka, Op. 24, No. 4

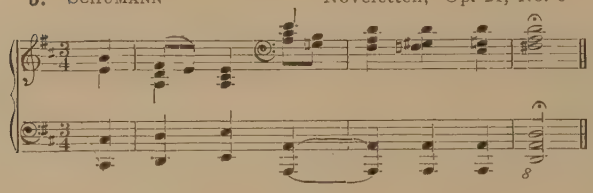


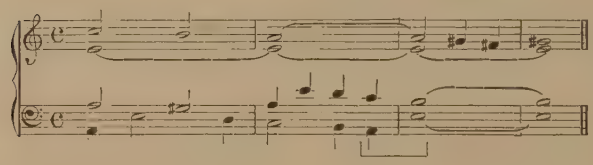
3. LISZT — Song, "Thou who from thy realms"

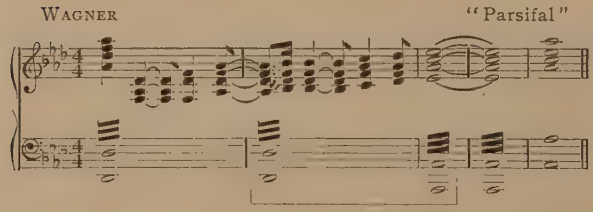


4. GRIEG — Song, "Du bist der junge Lenz"



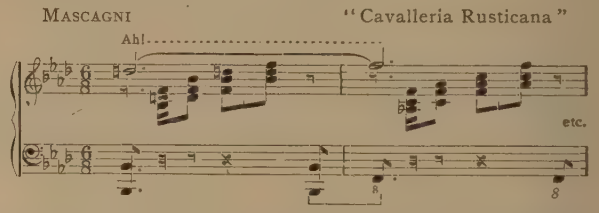
5. SCHUMANN — "Noveletten," Op. 21, No. 8

There is another form of perfect cadence that was formerly more in use than it is at present. It consists of the progression from the subdominant to the tonic, and is known as the plagal cadence. It survives in the Amen with which it is the conventional practice to end hymns in the English Church service. Composers rarely employ it to-day in its bald simplicity. They vary it by adding other notes and by inverting it. The cadence then loses its austere character and can hardly be called plagal. The example from Grieg (No. 4) is more like a plagal than a perfect cadence, though it is neither. The two examples next given are from the works of widely different schools and epochs: Bach's chorale in a kind of modified Phrygian mode, and the final harmonies of Wagner's last music-drama.

BACH — Chorale 150 (Edition Peters)

WAGNER — "Parsifal"



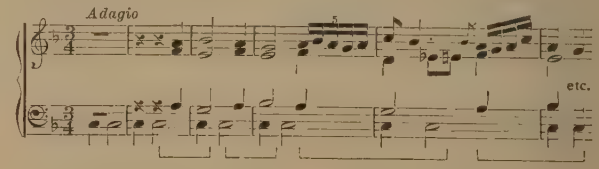
When the tonic chord is major the preceding subdominant is usually major, but a minor subdominant followed by a major tonic is not uncommon. It was formerly the custom to end minor compositions with the tierce de Picardie, a tonic chord with its third made major by means of an accidental. The Bach chorale quoted above is an example of this cadence.

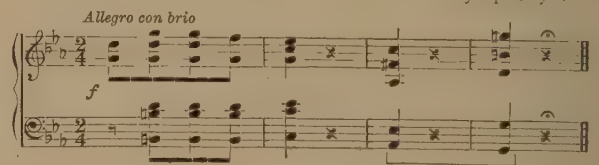
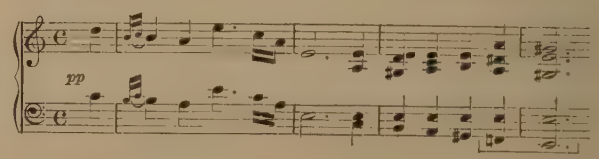
If a movement in a minor key ends with a plagal cadence the chord of the subdominant is almost invariably minor. A major subdominant followed by a minor tonic is very rare. The Siciliana in Mascagni's "Cavalleria Rusticana" is most effectively concluded with the unusual cadence that follows:

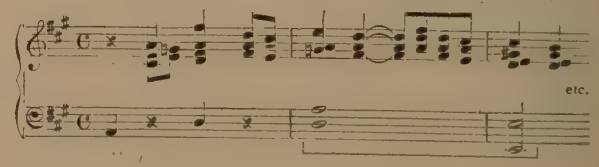
MASCAGNI — "Cavalleria Rusticana"

A fine treatment of the plagal cadence is to be found at the end of the twelfth number of Beethoven's "Missa Solemnis." Chopin ends one of his most fascinating and haunting melodies, the étude in E major, Op. 10, No. 3, with the plagal cadence.

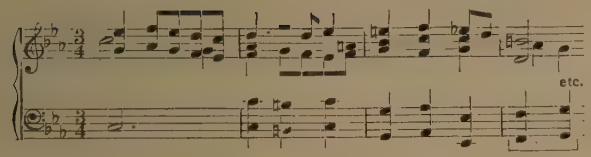
The reversed perfect cadence, a progression from the tonic or some other degree of the scale to an end on the dominant, is called an imperfect cadence or half-close. The distinctive feature of the half-close is the ending on the dominant. In the appended examples of the imperfect cadence or half-close it will be seen that the dominant is preceded by the tonic in the first quotation only.

1. BIZET — Suite "L'Arlésienne"



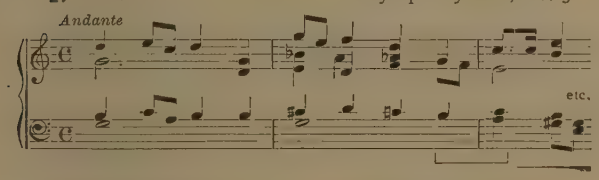
2. BEETHOVEN — Symphony V

3. SCHUBERT — Sonata in A minor

4. SAINT-SAËNS — "Samson et Dalila"

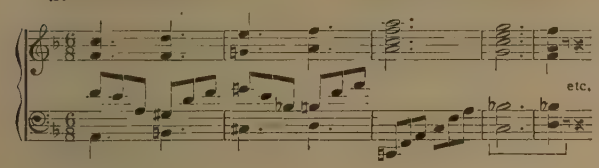
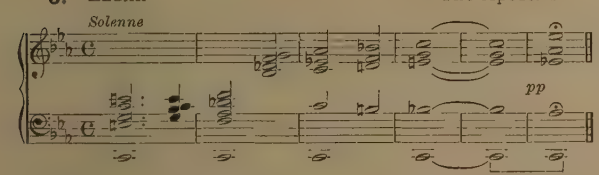


5. PURCELL "Dido and Æneas" (1680)

Interrupted or deceptive cadences are those terminations of a phrase which unexpectedly go to some other degree of the scale than the expected tonic. The detractors of Wagner waxed wroth at the variety of deceptive cadences the aggressive reformer hurled at their ears. Yet the deceptive cadence, or, as some call it, the interrupted cadence, is no new thing. It is to be found frequently in the works of the earliest composers. In the classical period from Bach to Beethoven, the commonest—in fact almost the only—form of deceptive cadence employed was the progression from the dominant to the submediant.

Since the advent of Wagner in particular, as well as of other modern composers, it is ordinary practice to quit the dominant for any harmonic destination whatsoever. The three subjoined quotations will suffice. The example from Brahms's third symphony is the usual form of a deceptive cadence, a progression from the dominant to the submediant.

1. BRAHMS Symphony in F, No. 3



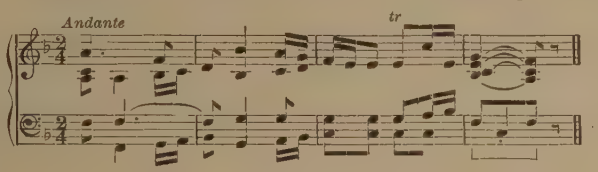
2. HUMPERDINCK "Hänsel und Gretel"

3. ELGAR "The Apostles"

Composers frequently put the perfect, plagal, imperfect, and deceptive cadences on an unchanging bass note. This note is either the tonic or the dominant. There is no reason why other notes than the tonic and dominant should not be used, provided the composer finds a way of making them agreeable to the ear. In phrases that have feminine endings Beethoven frequently sounds the tonic bass under the dominant harmony in his perfect cadences. A feminine ending in music is rhythmically identical with a feminine termination in poetry—it is a weak accent following a strong. The line

Ah, distinctly I remember, it was in the bleak December,

contains two feminine endings, "remember" and "December." The strong accent falls on the second syllables, which are followed by weak third syllables.

The following example shows the employment of dominant harmony on a tonic bass in a perfect cadence with a feminine ending:

BEETHOVEN Sonata for Violin and Piano, Op. 47



No progression is called a cadence unless it ends a phrase. The four progressions from tonic to dominant in the Bizet quotation above are not four half-closes. It is only the fourth that is cadential; the others do not end phrases.

Schumann, who did many daring things as a harmonic innovator, ends the first of his "Dichterliebe" songs with a dominant seventh chord. This is not unsatisfactory if it is followed by the next song, as the composer intended. The third of Berlioz's "Les nuits d'été" song cycle, Op. 7, ends with the triad on the dominant. The result is by no means unsuitable to Théophile Gautier's poem. The boldness of Berlioz has been surpassed in our day by Richard Strauss. In his works are to be found many remarkable cadences. The song "Wenn," Op. 31, and the symphonic poem "Also sprach Zarathustra," have characteristic Strauss ends. To the song the composer has added the ironical footnote: "If this end is disagreeable to the musicians of the nineteenth century, let them transpose it." The chord of B major high above the low bass note C is fittingly enigmatical as an end to the sayings of Zarathustra, though the outraged classical purists would gladly dedicate Strauss and his nefarious scores to that purifying element of the Zoroastrian religion of ancient Persia—fire!

If variety in cadence is desired, the sanest and most satisfactory procedure is to elaborate the harmonies and unsettle the tonality immediately before ending with a perfect cadence. The effect of the return to the dominant and tonic will be startling, dull, commonplace, or delightful, according to the skill with which the composer comes to the surface again after his plunge into the fathomless sea of harmony.

CHAPTER XV

INSTRUMENTATION

Influence of New Instruments in the Development of Orchestration—Why "Additional Accompaniments" are Irreverent—Variety in Color Results from Judicious Blending of Contrasting Elements—Wagner's Intimate Knowledge of the Orchestra.

INSTRUMENTATION is the art of adapting musical ideas to the varied capabilities of stringed, wind, keyed, and other instruments. It is scarcely possible to overestimate the influence exercised by this branch of technical science upon the advancement of modern music. The modifications through which it has passed are as countless as the styles to which it has given rise; yet its history, as recorded in the scores of the great masters, proves the principles upon which it is based to be as unalterable as their outward manifestation is, and always must be variable, and subject to perpetual progress.

Unaccompanied vocal music, however marked may be the differences existing between its individual schools, must perforce remain permanently subject to the laws imposed upon it by the character of the human voice. For instrumental music no permanent legislation is possible. Every new instrument introduced into the orchestra influences, more or less, every one of its companions. Every improvement in the form, compass, quality of tone, or executive powers of the instruments already in use suggests new ideas to the composer, and results in an endless variety of new combinations. To the number of such improvements there is no limit. Stringed instruments, it is true, change but little, except in the manner of their handling. The violin of to-day is the violin of two centuries ago. Not so the wind instruments. The trumpet now in common use differs almost as much from that with which Handel and Bach were familiar as it does from the organ stop to which it lends its name. The flute as known to Haydn and Mozart could scarcely hold its own, except in the upper octave, against half a dozen violins. The tone of its modern successor is as powerful as that of the clarinet, and brilliant enough to make itself heard with ease through the full orchestra; its powers of execution are almost unlimited; and better still, it can be played perfectly in tune—which the old flute could not. Improvements scarcely less important have been made in the horn, the clarinet, and the oboe. The trombone has suffered comparatively little change; and the bassoon retains, substantially unaltered, the form it bore when Handel wrote for it; but these alone, among wind instruments, have escaped a sweeping metamorphosis since the beginning of the last century.

Remembering this, we can scarcely feel surprised that the orchestration of the "occasional overture" should bear but little outward resemblance to that of the overture to "Tannhäuser." Yet the bond of union subsisting even between such extremes as these is much closer than might at first sight be supposed. The principle is in all cases the same. The best composers of every epoch have aimed at the same general characteristics; and experience has proved that where these are present no combinations can be condemned as wholly ineffective, whether they bear the stamp of true genius or not.

The most prominent characteristics of good instrumentation are: (1) Solidity of structure; (2) breadth of tone; (3) boldness of contrast; (4) variety of coloring. We will endeavor to illustrate each of these necessary qualities by examples selected from the scores of a few great masters of different periods.

1. Solidity of structure can only be obtained by careful management of the stringed instruments. If the part allotted to these be not complete in itself, it can never be completed by wind instruments. Whether written in five, four, three, or two parts, or even in unison, it must sound well, alone. This principle was thoroughly understood even as early as the close of the sixteenth century, when the originators of the newly invented instrumental schools bestowed as much care upon their viols as their immediate predecessors had devoted to their vocal parts. For instance, "Le Balet comique de la Royne"—a piece written in 1581—is so arranged as to be equally complete whether played by viols alone or with each separate part aided by a ripieno wind instrument.

Handel constructed many of his finest overtures upon this principle; and, in common with Johann Sebastian Bach and other great composers of the eighteenth century, he delighted in its fine, bold, masculine effect. Later writers improved upon it by embellishing the stringed foundation with independent passages for wind instruments. Thus Mozart, in his overture to "Figaro," first gives the well-known subject to the violins and basses in unison, and then repeats it, note for note, with the addition of a sustained passage for the flute and oboe, which brings it out in quite a new and unexpected light.

Sometimes we find this order reversed, the subject being given to the wind, and the accompaniment to the stringed instruments; as in the opening movement of Weber's overture to "Der Freischütz."

In either case, the successful effect of the passage depends entirely upon the completeness of the stringed skeleton. A weak point in this—whether the principal subject be assigned to it or not—renders it wholly unfit to support the harmony of the wind instruments, and deprives the general structure of that firmness which it is one of the chief objects of the great master to secure.

2. Breadth of tone is dependent upon several conditions, not the least important of which is the necessity

for writing for every instrument with a due regard to its individual peculiarities. This premised, there is little fear of thinness when the stringed parts are well arranged and strengthened, where necessary, by wind instruments, which may either be played in unison with them—as in the overture to "Jephtha," where Handel has reinforced the violins by oboes, and the basses by bassoons—or so disposed as to enrich the harmony in any other way best suited to the style of particular passages—as in that to "Acis and Galatea," in which the oboes are used for filling in the harmonies indicated by the figured bass, while a brilliant two-part counterpoint, so perfect in itself that it scarcely seems to need anything to add to its completeness, is played by the violins and basses, the latter being strengthened by the bassoons.

Among more modern writers, Beethoven stands pre-eminent for richness of tone, which he never fails to attain, either by careful distribution of his harmony among the instruments he employs, or in some other way suggested by his ever-ready invention. In a passage from the adagio of the Fourth symphony (in B♭) this richness is secured by the perfect proportion established between the tone of the stringed and wind instruments, which afford each other the exact amount of support needed for the completion of the general effect.

Other composers have attained similar results in innumerable different ways; but it will generally be found that the most satisfactory passages are those which exhibit a judicious disposition of the harmony, a just balance between the stringed and wind instruments, and a perfect adaptation of the parts to the instruments for which they are written. These points are worthy of particular attention.

3. Boldness of contrast is produced by so grouping together the various instruments employed as to take the greatest possible advantage of their difference of timbre. The instrumental band, as now constituted, naturally divides itself into certain sections, as distinct from each other as the manuals of an organ. The first and most important of these is the stringed band, which is the foundation of the whole. The second, sometimes called the "wood-wind," is led by the flutes, and completed by reed instruments, such as the oboe, the clarinet, and the bassoon. The third, the brass band, is subdivided into two distinct families, one formed by the horns and trumpets, to which latter the drums supply the natural bass, the other comprising the three trombones, and, in the noisy orchestras of the present day, the tenor tuba or euphonium. The principle of subdivision is, indeed, frequently extended to all the great sections of the orchestra. For instance, the flutes and oboes are constantly formed into a little independent band, and contrasted with the clarinets and bassoons. Handel even divides the stringed band, and produces fine effects of contrast by so doing. In a large proportion of his best and most celebrated songs, the voice is accompanied by a thorough-bass alone: that is to say, by a part for the violoncello and double bass, with figures placed below the notes to indicate the chords intended to be filled in on the organ or harpsichord. The symphonies are played by the violins, in unison, with a similar thorough-bass accompaniment; and the entrance of these instruments between the vocal passages is marked by a contrast as striking as it is agreeable.

In some of his songs Handel has enlarged upon this method; as in "Lascia ch'io pianga," from "Rinaldo," the first part of which is accompanied by the full stringed band, and the second by a thorough-bass only, the violins and viola reappearing at the da capo. It is impossible to believe that the great composers of the last century, with Handel and Bach at their head, adopted this style of accompaniment without having duly considered its effect; and any attempt to heighten that effect by additional accompaniments shows as little reverence for art as would be evinced by a desire to cover the Sistine Madonna with "additional glazings." The songs are perfect as they stand: and the contrast they display is as marked in its degree as that in the celebrated passage from Beethoven's Fifth symphony (in C minor), in which the stringed instruments and wood-wind are made to answer each other in alternate chords.

This last expedient is by no means uncommon in modern music, and has been most successfully used by Mendelssohn in his overture to "A Midsummer Night's Dream," where a few sustained notes on the wind instruments are contrasted with the rapid passage for four violins with excellent effect. The trio for brass instruments in the minuet of Sir William Sterndale Bennett's symphony in G minor is another striking instance of fine and quite unexpected contrast; and cases abound in which composers of instrumental music have treated the several sections of the orchestra very much in the way in which vocal writers treat alternate choirs, producing thereby innumerable beautiful effects of bold relief and strongly contrasted tone.

4. Variety of coloring results from the judicious blending together of the several elements which we have just considered as opposed to each other in more or less violent contrast. In the instrumentation of the great masters this quality is always conspicuous: in that of inferior writers never. Its presence may, indeed, be regarded as one of the surest possible indications of true genius, which never fails to attain it in the face of any amount of difficulty.

In the eighteenth century Handel wrought marvels with the slender means at his command: with trumpets and oboes in the opening movements of the "Occasional Overture" and the "Dettingen Te Deum"; with oboes and bassoons in "The Lord is a man of war"; with flutes and horns in "Surge procelle, ancora"; with a somewhat larger number of wind instruments in "Wise men flattering"; but often, as in "Angels ever bright and fair," with the stringed band alone, and always with infinite variety of tone and expression. Bach anticipated, in like manner, many of our most highly prized modern effects, as in the delicious combination of horn and bassoons in the "Quoniam tu solus" of his mass in B minor.

As new wind instruments were invented, or old ones improved, the power of producing variety of coloring became, of course, immeasurably increased. Haydn took signal advantage of this circumstance in "The Creation" and "The Seasons"; but Mozart's delightful system of instrumentation surpasses in beauty that of all his contemporaries. His alternations of light and shade are endless. Every new phrase introduces us

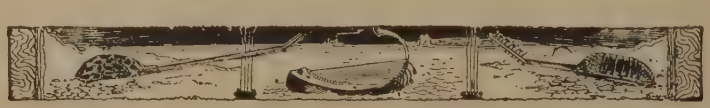
to a new effect; and every instrument in his orchestra is constantly turned to account, always with due regard to its character and capabilities, and always with a happy result.

It may be necessary to say that Beethoven was a greater master of this peculiar phase of instrumentation than Mozart; and in this, as in everything else, he certainly repeated his own ideas less frequently than any writer that ever lived. The wealth of invention exhibited in the orchestral effects of this composer—even in those of his works which were produced after his unhappy deafness had increased to such an extent that he could not possibly have heard any one of them—is boundless. In every composition we find a hundred combinations, all perfectly distinct from one another, yet all tending, in spite of their infinite variety, to the same harmonious result, and all wrought out, with indefatigable care, in places which many less conscientious authors would have passed over as of comparatively little importance—such, for instance, as the two or three concluding bars of the slow movement of the "Pastoral" symphony (No. 6, in F).

This minute attention to detail is observable throughout the entire series of Beethoven's orchestral works, and we may well believe that it stimulated in no small degree the emulation of his contemporaries, for the age in which he lived produced more than one instrumentalist of the highest order. Schubert, we need hardly say, is a host in himself. Weber's mastery over the orchestra is perfect, and adds not a little to the charm of his delightful compositions. The dreamy opening of his overture to "Oberon," with its three sweet notes for the horn, followed by one of the most fairylike passages for the flutes and clarinets that ever was imagined; the lovely melody allotted to the horns in the overture to "Der Freischütz," and the eldritch sounds which succeed it; above all, the mysterious largo, for four violins, con sordini, which so strangely interrupts the allegro of the overture to "Euryanthe," and the gloomy tremoli for the viola which add so much to its weird effect—these, and a hundred similar passages, evince a purity of taste and an originality of conception which have rarely, if ever, been exceeded by the greatest masters. Mendelssohn exhibits scarcely less richness of invention in his symphonies, his concertos, and especially in his charming concert overtures to "Die schöne Melusine" and "A Midsummer Night's Dream." In freshness of coloring, and inexhaustible fertility of resource, Spohr's great symphony "Die Weihe der Töne" once served as a model. Berlioz, whose "Traité d'instrumentation" no young composer should neglect to read, studied the subject deeply and with extraordinary success. And undoubtedly the strongest of Richard Wagner's strong points is that intimate acquaintance with the orchestra in all its phases which, guided by his keen perception of effect, enabled him to weave its elements into any new combinations best suited to his purpose. He it was who first conceived, among other daring and beautiful innovations, the idea of using the high harmonic sounds of the violin in unison with flutes and other wind instruments. The prelude to "Lohengrin" depends almost entirely for its enchanting effect upon four solo violins and three flutes, used in a way before unknown, and crowned, it is needless to say, with triumphant success.

It is indeed certain that during the years that have elapsed since the death of Beethoven more real progress has been made in instrumentation than in almost any other branch of art. Innumerable new effects have been attempted, with more or less success; and though much evil has been wrought of late years by a growing tendency to overweight the brass band with coarse-toned instruments fit only for military use, the best composers have uniformly resisted the movement. Preferring sonority to noise, they have left the latter to those who aim at nothing higher than the short-lived approval of a vulgar audience. In truth, less mischief has been done by composers even of the lowest class of dance music, than by injudicious conductors, who, never satisfied when the trombones are silent, have overloaded the scores of the great masters with additions of the most unwarrantable character. So far has this abuse extended, that the student can never be sure that he is listening to the effect really intended by the composer. Let him, then, endeavor to gain experience, by studying the scores of all the best works to which he can obtain access; and when he shall have attained the power, not only of recognizing in performance the effects he has already read upon paper, but even of hearing them distinctly in imagination while he is reading them, he will have gained the first step in that road which all must tread who would write well for the orchestra, and delight their hearers with really good instrumentation.

It is in this way alone that the art can be satisfactorily studied. It cannot be taught in words. Much valuable information may indeed be gleaned from the well-known treatises of Berlioz, Prout, and Gevaert, which no earnest student should neglect to read. But even the most careful writers find it less easy to lay down definite rules for their readers' guidance than to convey instruction by constant reference to examples selected from the works of the great masters. It is for this reason that we have thought it better to take a general view of our subject than to enter minutely into its details. This course has at least enabled us to give due prominence to the fundamental principles upon which the science of orchestration is based; whereas the opposite one would have led to the consideration of a series of isolated facts of far less value to the general reader.



CHAPTER XVI

RHYTHMS

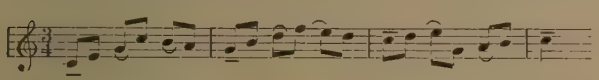
Structure and Rhythms—Grammatical and Oratorical Accents—The Bar-line—Various Time-Signatures—Contrasts in Rhythm—Liking for Rhythm Inborn.

BEFORE we can understand the form of an extended musical work, it is necessary to study the structure, the rhythms, and the varying emotions of each movement or section of the work; and to get a clear understanding of a movement, the themes and phrases must be studied in detail.

Rhythm in music, as in poetry, consists of regular, recurring accents. In poetry the rhythm is indicated by the position of the accented words and syllables. In music the rhythm is marked, first by the position of the bar-lines, and secondly by the number and length of the notes between the bar-lines. The rhythm, or regular accentuation, which results from the position of the bar-line, is called the grammatical accent. The occasional accent irregularly placed on other notes which would otherwise be unaccented, is called the oratorical accent. Rhythm is the meter of music. The reader is referred to Ernst Pauer's "Musical Forms" for definitions of these technical terms of musical meter: trochee, iambic, spondee, bacchic, cretic, antibacchic, molossus, tribrach.

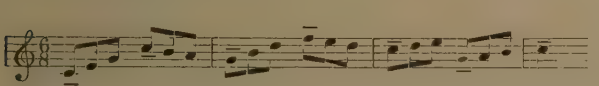
Composers not only place bar-lines throughout a composition, but they also add a time-signature in the first bar to indicate how many beats each bar is to have. The necessity for a time-signature will at once be apparent if we try to play this passage without a time-signature:

The rhythm is not clearly indicated by the bar alone. If the time-signature is $\frac{3}{4}$ there will be three accents in the bar, thus:



The first accent will be strong, and the second and third weaker.

If the time-signature is $\frac{6}{8}$ there will be two almost equal accents in the bar, thus:



The reason why there are only two accents in these bars and not six is that $\frac{6}{8}$ is a compound rhythm, while $\frac{3}{4}$ is a simple rhythm.

Compound time is a term applied to a bar that can be subdivided into two or more smaller bars.

The time-signatures most commonly used are:

(*a*) common time, which is marked $\frac{4}{4}$ or C
(*b*) $\frac{3}{4}$; (*c*) $\frac{2}{4}$; (*d*) $\frac{6}{8}$.

Of these it is unnecessary to give examples. The less used time-signatures are:

¢ or $\frac{2}{2}$ (alla breve)—Schubert, Symphony in C, first movement.
$\frac{3}{2}$ - - Wagner, "Die Meistersinger," Intro., Act iii.
$\frac{4}{2}$ - - Schumann, "Paradise and the Peri," No. 15.
$\frac{9}{4}$ - - Wagner, "Parsifal," Prelude.
$\frac{2}{8}$ - - Berlioz, "Faust," Chanson de Brander.
$\frac{3}{8}$ - - Rossini, "Guillaume Tell," No. 1.
$\frac{9}{8}$ - - Beethoven, Sonata Op. 109.
$\frac{9}{16}$ - - - " " Op. 111.
$\frac{12}{16}$ - - Bach's Prelude No. 13, Vol. I, W. T. C.

In Bach's works are to be found, in addition to all the time-signatures mentioned above, the following unusual time-signatures:

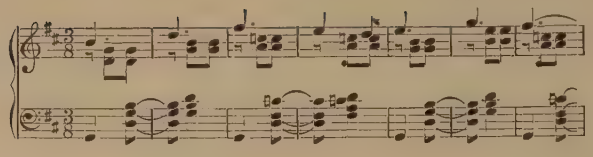
2 & 2 - Sonata for violin and clavier.
$\frac{12}{8}$ - Prelude V, vol. ii of the 48 Preludes and Fugues.
$\frac{6}{16}$ - Fugue in D.
$\frac{24}{16}$ - Toccata and Fugue in G minor.
$\frac{16}{32}$ - Clavier Fantasia.
C & Ↄ (double common)—Partita VI.

Composers occasionally employ two or more rhythms at once. Examples may be found in the following works:

$\frac{2}{4}$ and $\frac{6}{8}$ together—Berlioz, "Faust," Chorus of Soldiers and Students.
$\frac{6}{4}$ and $\frac{6}{8}$ together—Berlioz, "L'enfance du Christ."
$\frac{9}{8}$ and $\frac{3}{4}$ " " " "
$\frac{24}{16}$ and $\frac{3}{4}$ Bach, Prelude XV.
$\frac{12}{8}$ and $\frac{3}{4}$ together " Cantata 102.
$\frac{3}{4}$ and $\frac{9}{8}$ " " " 24.

In Mozart's "Don Giovanni" is to be found an example of a German dance ($\frac{3}{8}$), a gavotte ($\frac{2}{4}$), and a minuet ($\frac{3}{4}$), to be performed simultaneously.

In E. A. MacDowell's "Hexentanz," Op. 17, No. 2, there is a pleasing and ingenious combination of $\frac{3}{8}$ and $\frac{3}{4}$. It is true the $\frac{3}{4}$ time is not indicated in the signature, but the effect of the left-hand part of the brilliant piano solo, which is here given in a simplified form, is that of a $\frac{3}{4}$ rhythm:

MacDowell

The student is referred to Spohr's symphony "Die Weihe der Töne" for some peculiar time-signatures.

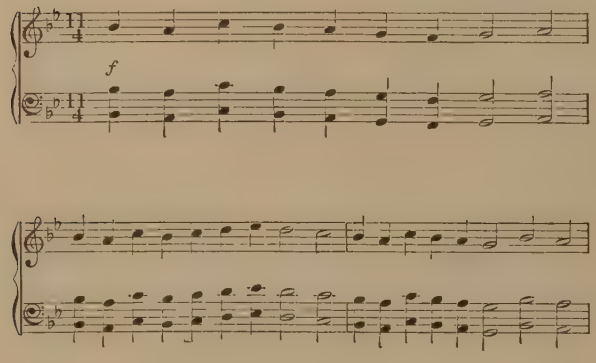
In all these examples the rhythms are simple or compound forms of 2, 3, or 4. Rhythms of 2 or 4 might be represented to the eye by angles, and rhythms of 3 by curves.

In rare instances the composer finds it necessary to avail himself of rhythms that cannot be compounded of 2, 3, or 4:

$\frac{5}{4}$	-	Chopin, Sonata in C minor.
$\frac{7}{4}$	-	Elgar, "Caractacus," Lament.
$\frac{5}{8}$	-	" "The Dream of Gerontius."
$\frac{7}{8}$	-	Lucas, Pastorale for organ, Op. 31, No. 2.

The $\frac{5}{4}$ is the most frequently employed of this class of rhythms. The insinuating movement in Tchaikovsky's "Symphonie pathétique" is a popular example of $\frac{5}{4}$. Alice C. Fletcher, whose "Study of Omaha Indian Music" has been published by the Peabody Museum of American Archæology and Ethnology of Harvard University, gives examples of native songs in $\frac{5}{4}$ rhythms; and A. M. Chinnaswami Mudaliyar's "Oriental Music," published in Madras, contains examples of native East Indian melodies in $\frac{5}{4}$ rhythms, showing that this rhythm is sometimes the product of musical instinct. But it is probable that art and a search for novelty, rather than instinct, were responsible for Rimsky-Korsakov's $\frac{11}{4}$ rhythm.

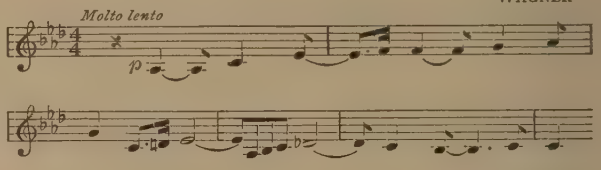
Rimsky-Korsakov



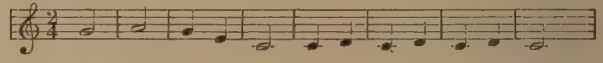
Sir Edward Elgar informs us that as a boy he wrote pieces in $\frac{11}{4}$ and $\frac{13}{4}$ rhythms.

Composers sometimes weaken the rhythm, or eliminate it altogether, when they wish to avoid all taint of human passion in their religious works. Many masses of Palestrina are notable examples of the subordination of rhythm. In Wagner's religious drama, "Parsifal," the sacramental theme is so constructed that it is impossible for the listener to feel any rhythmic pulse in it.

Wagner



Rhythm is the life, the heart-beat of music. Through it the various temperaments of composers of different nationalities are easily discernible. Compare the rhythms of Rossini's "Guillaume Tell" with those of Wagner's "Die Meistersinger." The vivacity of the Italian and the massiveness of the German are expressed by rhythms alone. The folk-songs of romantic Spain are almost always in rhythms of 3 or 6; while the prosaic Chinaman employs the squarer 2 and 4 rhythms.

The capacious and sensitive brain of a great composer could not be limited in its expression to the simple rhythms of primitive man. The following tune, which is a complete musical expression of the savages of Brazil, is transcribed from the singing of an engineer who had spent many months on the banks of the Amazon:

What an abyss separates the dull brains of the barbarians who delight in bellowing this phrase for hours from the intellect that conceived the rhythms of Schumann's "Manfred" overture!

Darwin says it is impossible to give a reason for this liking for melody and rhythm. It is inborn, like our sense of taste and smell. Our earliest impressions are through the senses, and a rhythmical sound pleases the infant that an irregular noise would frighten. As Darwin declares: "The sensations and ideas thus excited in us by music, or expressed by the cadences of oratory, appear from their vagueness, yet depth, like mental reversions to the emotions and thoughts of a long-past age."

CHAPTER XVII

PROGRAMME MUSIC

Imitation of the Sounds of Nature—Some Noteworthy Examples—The "Pastoral" Symphony—Descriptive Music in Mendelssohn's Overtures—Liszt and the Symphonic Poem—Culmination of this Form in Richard Strauss.

PROGRAMME music is an epithet originally intended to apply to that interesting class of music which, while unaccompanied by words, seeks to portray, or at least suggest to the mind, a certain definite series of objects or events. But the term is also applied, with vagueness of meaning, to all dramatic, characteristic, or imitative music whatever. It must always remain an open question how far music is able of itself to influence the mind's eye, for the simple reason that some imaginations are vastly more susceptible than others, and can therefore find vivid pictures where others see and hear nothing. Also, in programme music of all kinds, the imagination is always turned in the required direction by the title of the piece, if by nothing else.

It is held by some that music should never seek to convey anything beyond the "concourse of sweet sounds," or at least should only portray states of feeling. But what is the opinion of the bulk of audiences, who, though artistically ignorant, are not of necessity vulgar-minded? To the uninitiated a symphony is a chaos of sound, relieved by scanty bits of "tune"; great then is their delight when they can find a reason and a meaning in what is to them like a poem in a foreign tongue. A cuckoo or a thunderstorm assists the mind which is endeavoring to conjure up the required images. And two other facts should be borne in mind: one is that there is a growing tendency among critics and educated musicians to invent imaginary "programmes" where composers have mentioned none—as in the case of Weber's Concertstück and Schubert's C major symphony, for instance—and another, that music, when accompanied by words, can never be too descriptive or dramatic, as in Wagner's music-dramas and the "Faust" of Berlioz.

May it not at least be conceded that though it is a degradation of art to employ music in imitating the sounds of nature—illustrious examples to the contrary notwithstanding—it is a legitimate function of music to assist the mind, by every means in its power, to conjure up thoughts of a poetic and idealistic kind? If this be granted, programme music becomes a legitimate branch of art, in fact the noblest, the *nature of the programme* being the vital point.

The *Leitmotiv* is an ingenious device to overcome the objection that music cannot paint actualities. If a striking phrase once accompany a character or an event in an opera, such a phrase will surely be ever afterward identified with what it first accompanied. The "Zamiel motive" in "Der Freischütz" is a striking and early example of this association of phrase with character.

It is quite possible for a musical piece to follow the general course of a poem or story, and, if only by evoking similar states of mind to those induced by considering the story, to form a fitting musical commentary on it. Such programme pieces are Sir William Sterndale Bennett's "Paradise and the Peri" overture, Von Bülow's "Sängers Fluch," and Liszt's "Mazeppa."

Among descriptive vocal pieces of the seventeenth century should be noticed the frost scene in Purcell's "King Arthur," in which the odd effect of shivering and teeth-chattering is rendered by the chorus. Such imitations are said to have created much delight among the audience.

A number of Haydn's symphonies are distinguished by names, but none are sufficiently descriptive to be included here. Characteristic music there is in plenty in "The Seasons" and "The Creation," but the only pieces of actual programme music—and those not striking specimens—are the earthquake movement, "Il Terremoto," in the "Seven Words," and the representation of chaos in "The Creation," by an exceedingly unchaotic fugue. Mozart adds nothing for us here, though it should be remembered how greatly he improved dramatic music.

Beethoven was his own authority for the fact that when composing he had always a picture in his mind, to which he worked. But in two instances only has he described at all in detail what the picture was. These two works, the "Pastoral" and the "Battle" symphonies, or of vastly different caliber. The former, without in the slightest degree departing from orthodox form, is a splendid precedent for programme music. In this, as in most works of the higher kind of programme music, the composer seeks less to imitate the actual sounds of nature than to evoke the same feelings as are caused by the contemplation of a fair landscape, etc. It may be worth mentioning that the "Pastoral" symphony has actually been "illustrated" by scenes, ballet, and pantomime action in theaters.

Another interesting fact concerning the "Pastoral" symphony is the identity of its programme with that of the "Portrait musical de la nature" of Knecht. The similarity, however, does not extend to the music, in which there is not a trace of resemblance. Some description of the little-known "Battle" symphony may not be out of place here. It is in two parts; the first begins with "English drums and trumpets," followed by "Rule Britannia," then come "French drums and trumpets," followed by "Malbrough." More trumpets to give the signal for the assault on either side, and the battle is represented by an allegro movement of an impetuous character. Cannon of course are imitated—storming march—presto—and the tumult increases. Then "Malbrough" is played slowly and in a minor key, clearly, if somewhat inadequately, depicting the defeat of the French. This ends the first part. The second part is entitled "Victory" symphony and consists of an allegro con brio followed by "God Save the King"

—a melody which Beethoven greatly admired. The allegro is resumed, and then the anthem is worked up in a spirited fugato to conclude.

As for the other works of Beethoven that are considered as programme—or at least characteristic—music, it is sufficient here to remark that the "Eroica" symphony only strives to produce a general impression of grandeur and heroism, and the "Pathetic" and "Farewell" sonatas do but portray states of feeling, ideas which music is peculiarly fitted to convey.

Coming now to modern times, we find a perfect mania for giving names to pieces—showing the bias of popular taste. Every concert overture *must* have a title, whether it be programme music or not. Every "drawing-room" piece, every waltz or galop, must have its distinctive name, till we cease to look for much descriptiveness in any music. It cannot be said that all Mendelssohn's overtures are programme music. The "Midsummer Night's Dream," with its tripping elves and braying donkey, certainly is, but the "Meeresstille," "Hebrides," and "Melusine" are only pieces which assume a definite color or character, the same as his "Italian" and "Scotch" symphonies. To this perfectly legitimate extent many modern pieces go; and some term like "tinted music" should be invented for this large class of compositions, which includes the greater part of Schumann's pianoforte works, for instance. The "Carneval" is decidedly programme music, so are most of the "Kinderscenen" and "Waldscenen"; while others, despite their sometimes extravagant titles, are purely abstract music. It is well known that Schumann often invented the titles after the pieces were written. Such pieces as the fantasia in C and the longer "Noveletten" from their poetic cast and free form give a decided impression of being intended for descriptive music.

Spohr's symphony "Die Weihe der Töne" bears some relation to the "Pastoral" symphony in its first movement; the imitations of nature's sounds are perhaps somewhat too realistic for a true work of art, but have certainly conduced to its popularity.

David's wonderful ode-symphonie "Le désert" must not be omitted, though it is almost a cantata, like the "Faust" of Berlioz. Modern dramatic music, in which descriptiveness is carried to an extent that the old masters never dreamed of, forms a class to itself. This is not the place to do more than recall the wonderful achievements of Weber and Wagner.

Berlioz was one of the greatest champions of programme music; he wrote nothing that was not directly or indirectly connected with poetical words or ideas; but his love of the weird and terrible has had a lamentable effect in repelling public admiration for such works as the "Francs Juges" and "King Lear" overtures. Music which seeks to inspire awe and terror rather than delight can never be popular. This remark applies also to much of Liszt's music. The novelty in construction of the "Symphonische Dichtungen" would be freely forgiven were simple beauty the result. But such subjects as "Prometheus" and "The Battle of the Huns," when illustrated in a sternly realistic manner, are too repulsive, the latter of these compositions having indeed called forth the severe remark from an eminent critic that "these composers [Liszt, etc.] prowl about Golgotha for bones, and, when found, they rattle them together and call the noise music." But no one can be insensible to the charms of the preludes "Tasso," "Dante," and "Faust."

Bennett's charming "Paradise and the Peri" overture is a good specimen of a work whose intrinsic beauty pulls it through. An unmusical story, illustrated too literally by the music—yet the result is delightful. Raff, who ought to have known public taste as well as any man, named seven out of his nine symphonies, but they are descriptive in a very unequal degree. The "Lenore" follows the course of Bürger's well-known ballad, and the "Im Walde" depicts four scenes of forest life. Others bear the titles of "The Alps," "Spring," "Summer," etc., but are character music only. Raff, unlike Liszt, remains faithful to classical form in his symphonies, though this brings him into difficulties in the finale of the "Forest" symphony, where the shades of evening have to fall and the "Wild Hunt" to pass, twice over. The same difficulty is felt in Bennett's overture.

That the taste for "music that means something" is an increasing, and therefore a sound one, no one can doubt who looks on the enormous mass of modern music which comes under that head. Letting alone the music which is only intended for the uneducated, the extravagant programme quadrilles of Jullien, and the clever, if vulgar, imitative choruses of Offenbach and his followers, it is certain that every piece of music now derives additional interest from the mere fact of having a distinctive title. Two excellent specimens of the grotesque without vulgarity in modern programme music are Gounod's "Funeral March of a Marionette" and Saint-Saëns's "Danse macabre." In neither of these is the mark overstepped. More dignified and poetic are the other "Poèmes symphoniques" of the latter composer, the "Rouet d'Omphale" being a perfect gem in its way. We may include Goldmark's "Ländliche Hochzeit" symphony in our list, and if the characteristic studies of Moscheles, Liszt, Henselt, and others are omitted, it is because they belong rather to the other large class of character pieces.

Coming down to the present day, we find the foremost composer of programme music in Richard Strauss, who, having adopted the free outlines of the symphonic poem devised by Liszt as his preferred medium for the expression of his musical ideas when restricted to the use of orchestra alone, first attracted attention to himself as the composer of "Also sprach Zarathustra." A long succession of similar works, culminating in the "Sinfonia Domestica," evoked this comment from James Huneker: "He has in his symphonic forms pushed to the verge of the sublime—or the ridiculous—or both—the poetic programme."

APPRECIATION OF MUSIC

I. HOW TO ENJOY MUSIC

By Annie W. Patterson

Nature and Effect of Music—Audiences of To-day—Sense of Rhythm—Appreciation of Tune—Contrast in Melody—Taste for Classical Music—Concert Reform—Music in the Home—Influence of Surroundings—Beneficial Powers of Music.

MUSIC has been defined as the language of the emotions—a description of its properties which fits the art better than to term it the language of sound, and thus class it, as did Dr. Samuel Johnson, among "the least disagreeable of noises."

That sensations produced by the hearing and performing of music should be pleasurable ones, few will deny. The enjoyment which music-making gives varies, however, with the kind of music rendered, as with the temperament, education, and natural gifts of individuals. Thus, while simpler forms, such as the lullaby or military march, respectively soothe or exhilarate, those who experience a sense of exultation on listening to a good interpretation of a Beethoven symphony are often, if students or thinkers, irritated past endurance by the barrel-organ's version of the latest "popular song." The reputation of a nation's musicianship depends, indeed, upon its faculties for gratification either in rendering or listening to music; so in this chapter the point to be emphasized is the enjoyment of music, a topic demanding consideration from a hearer's as well as a performer's point of view.

If audiences wore their hearts upon their sleeves, it would be interesting to collect statistics recording the genuine feelings produced by concerts and all descriptions of musical performances. Upon reading accounts of grand opera during the season at the Metropolitan Opera House, one is disposed to believe that the music is a mere background for the assemblage of wealth and title, the display of diamonds, and, quite incidentally, the appearance of a famous "star." It is well known also that patrons of musical comedy do not often frequent a chamber-music recital, nor do those who revel in a ballad concert care to sit out an orchestral performance. The absurdity comes in when highly cultured modern musicians, who have been gradually acclimatized to the rarefied atmosphere of Brahms, Tchaikovsky, and Richard Strauss, look down with scornful pity upon uncultured music-lovers who can only enjoy something that has "a step and a tune" in it. Yet here, perhaps, the "advanced" musician makes a mistake, not only in judgment but with regard to the legitimate progress of his profession.

It is unfair to say of a reader that he is devoid of poetic feeling if, although he may delight in the easy meters and simple imagery of Longfellow, he finds Browning somewhat beyond his depth. Evidently, to bring the enjoyment of good music within the reach of all, there needs broader intelligence on the part of audiences, and greater tolerance and perspicuity on the part of those who musically cater for them. The supreme influence of the press is not to be forgotten. Instead of relegating musical articles and departments to the shortest possible space as of no importance, editors may do well to think of that immense and ever-growing student and amateur class who, if they sometimes swell the profits of the music-pirate, are now clamoring for gramophones and piano-players—anything from a tin whistle to a pianola—that will give them music in the home.

The first step toward musical appreciation appears to be the sense of rhythm or recurrence of beats. Even though the love of percussion instruments is strong in the savage, the fondness of the child for clicking toys, or his ability to march in time to the music of a military band, should not be despised. In the Gaelic peoples we observe an innate sense of rhythm, whence the multitude and beauty of many highly characteristic national dances—the reel, jig, and hornpipe. The eminently vital popularity of the brass band in many countries shows that the people have that first essential of a musical ear, the sense of recurrent beats. One ought to be rather lenient with the noisy man who, at a concert, keeps time with his feet to a popular tune. His enjoyment of the periodic beat is as keen as is the delight of the baby who smiles and crows when a ticking watch is placed to his ear.

Next to rhythm, and often coexistent with it, comes the appreciation of tune. Take any people's tune or folk-song and submit it to analysis. Suppose, for example, that "Home, Sweet Home," "The Bluebells of Scotland," and "The Harp that once through Tara's Halls" be the selections chosen. In each of these there will be found a first or principal phrase of a singable character. This is usually repeated, with or without a varied cadence, as in the first two named. In the middle portion there is a rising effect, produced either by pitch or scale ascent. Finally, in the concluding phrase, there is a strong reminiscence, if not a direct repetition, of the original or chief theme. Herein we have sonata form in embryo, the groundwork of the classical composer's art. Indeed, the wondrous symmetry of national song—theme, middle phrase, and repetition—offers a fascinating study; and as an impetus to such research it may be mentioned that Sir Charles H. H. Parry considers the ancient Gaelic tune "Emer's Farewell to Cuchullain" one of the most perfect melodic fragments in existence. Hence the fondness for beautiful melody, or even for its music-hall travesty with the much-beloved "step and tune," is by no means to be ignored by those who would make music for the people.

Were one further to analyze the nature of melody which gives the most universal pleasure, it might appear to be based upon a well-balanced contrast of as-

cending and descending diatonic scale intervals. That going up and going down the gamut produces, respectively, sensations of exertion and repose, is generally allowed. The mingling of these suggestions of activity and rest will be found, in miniature, in well-nigh all favorite songs; while the working up to a climax—whether of pitch or intensity, or both—and the fall to a final cadence, constitute those features which give life to more extended compositions. One is reminded here of the way in which rural Scottish precentors sometimes recollect the swing of the well-known tune "Dundee," which in many old Presbyterian congregations is popularly known as "French." The memory-lines, which exactly fit the common measure of the melody, go as follows:

The first tune we do sing is "French";
The second measure low;
The third extendeth very high;
The fourth downward doth go,

the word "tune" here referring to each phrase, or section, of the melody.

We are now brought face to face with an interesting problem. If the performance of music should make for universal enjoyment, how can many musical programmes, which confessedly appeal but to a few, be made generally acceptable? The question is, how can music become as widely acceptable as is, say, fiction? It is scarcely fair for "advanced" musicians to assume the attitude of high priests and forbid all but the elect minority to enter the inner sanctuary of exalted appreciation. The taste for classical music is an acquired one, just as fondness for certain viands is brought about by circumstances and conditions of life. Tastes, it is allowed, will always differ; but some compromise can always be arrived at which, while affording luxuries and titbits to palates desiring them, may yet cater on a liberal scale to those who have a healthy appetite for all foods that are wholesome and nutritive. If the masses do not yet fully enter into the delights of oratorio, grand opera, or orchestral symphony, not by forcing such heavy aliment down their throats, but by gradually increasing mild doses, may the rarer musical tonic or sedative at length have due effect.

The first step toward popular musical reformation must be wholesale readjustment of concert programmes. These are frequently far too long—the menu of the ballad concert insufferably so. Who is not wearied to boredom by sitting out twenty or more numbers, however admirable may be individual singers? Among the artists some must invariably suffer through such undue prolongation; for, with sopranos, tenors, solo violinists, and pianists clamoring for the "best" places, the unhappy mezzo sopranos and barytones must begin and end the performance, generally to the accompaniment of the clatter of late arrivals or early departures. Regarding individual selection, artists will do well, if they desire to make a really pleasurable impression, to keep their ambition within bounds. Bracketed numbers and song-cycles are less acceptable to the general public than their exponents are willing to believe. Often the ovation which a performer meets with on the conclusion of his item embodies an expression of relief that so lengthy a number is over.

Nor, were love for the art itself genuine, should there be so wide a distinction between artists of different kinds. This might be death to the "star system"; but it would be life to the musical instincts of the people. Young beginners with fresh voices would not then worry themselves into premature middle age before they were acknowledged virtuosi; nor would an opening concerted number, full of the matured beauty of a great master, be listened to with less rapt attention than the better-placed warbling of a favorite tenor. Were the length of an ordinary concert reduced to an hour, and less stereotyped methods observed in the order in which singers appear, it is possible that the public would eventually go to such entertainments to enjoy the music itself, not merely to have it to say that they have heard a certain celebrity. Again, two or more symphonies at the same orchestral performance seem a plethora of good things. Even the most appreciative palate becomes satiated after a certain point. It is questionable if the second portion of "Messiah" and "Elijah" programmes, or the last acts of Wagner operas, are as much enjoyed by the majority of listeners as if these portions could be heard at the beginning of performances, when the mind is fresh to imbibe their intrinsic beauties.

The logical conclusion that an unprejudiced observer must come to is that, living in an age when time must be economized, everything should fit its particular period and place, and at all events not err by either oppressiveness or aggressiveness. Even mechanism has come to the aid of the student who practises; and what with the digitorium, physical drill, practice-claviers—to say nothing of self-players—every possible device is offered to the learner to diminish his own drudgery in preparation work, and save the irritation caused to hearers by incessant reiteration of scales and technical exercises.

The charm of music in one's home circle depends, no doubt, on the members composing that circle—on their individual temperaments and abilities. Apart from gifts of solo playing and singing, there are, for moderate performers, the very real pleasures of duet and concerted work of all kinds. The pianoforte duo might well be cultivated more than it is. It is a practical assistance in sight-reading, capital exercise for those who are weak timists, and a source of delightful companionship in performance which only needs trying to be appreciated. The formation of glee-parties, meeting from house to house on fixed evenings every week, is to be recommended as a practical method of tasting the sweets of part-singing—an art long practised in student circles by the German people.

Surroundings have unquestionably much to do with the enjoyment of music. Possibly the keenest delight of all is felt by one who, brought up in unmusical environments, gradually makes for himself an atmosphere of sweet sounds, eventually drawing others into the same enchantment. The greatest musical enthusiasts appear to come from that class which, having encountered many obstacles in winning a position in the world of music, can enter into, and feel for, the difficulties in the way of struggling professional musicians. It remains a curious fact that, with a few noted exceptions, the children of musicians seldom inherit the gifts of their progenitors.

Higher still than the production of feelings, soothing, reflective, or encouraging, is the tendency which music has, when rightly administered, to act as a curative agent. The Biblical incident of David driving the evil spirit from Saul with his harp-playing will occur to many. Celtic legendary lore is particularly rich in accounts of musical performances, mysterious or otherwise, which are said to have softened angry passions, produced ecstatic exhilaration, or lulled persons to sleep. Music has often been the solace of the dying; and attempts have been made to apply the "sound-cure" to the sick, with encouraging results. Again, physicians acknowledge that in cases of mental disease music has been found to produce beneficial effects, the only question being the method and nature of its application as a palliative. For lassitude or depression, melodious sounds are often a sovereign balm, and one is forcibly reminded in this connection of Milton's lines:

> And ever against eating cares
> Lap me in soft Lydian airs.

Were the heads of the medical profession to examine the virtues of this music-remedy, doubtless it might be found capable of scientific application in a marvelous way. It may be that imaginative romance is ahead of theoretical research in this respect. Yet few others are so skeptical as educated musicians regarding the extraordinary emotional influence often attributed to music by novelists who, from their own showing, are strangely ignorant both of the theory and practice of an art upon which they dilate in such glowing terms.

Assuredly in this as in all other domains of research, though ignorance may long be a stumbling-block, knowledge is power. A clearer understanding of the aims and possibilities of music, of means for getting practically acquainted with its various departments and branches, is the first desideratum. We would therefore appeal not only to those already acquainted with the practice of music, but also to the vast circle of *listeners to music*. These should learn what is implied in the work of true creative and executive artists, whereby they sway the emotions and uplift the minds and lives of all who listen well. The hearing ear and the seeing eye are alike necessary to the appreciation of arts that appeal to them respectively.

II. HOW TO LISTEN TO OPERA

By E. Markham Lee

Feelings of Disappointment—Expectations—The Language Difficulty—Why the Story is Hard to Follow—What We Go to the Opera to Hear—Some Suggestions—To Grasp the Story—To Realize the Style of the Music—Rehearing Necessary—How to Begin to Study Opera—What is Necessary for its Enjoyment.

IN this chapter we have no thought of laying down the law to those already wise in the things here discussed. The musician and the opera habitué will not need telling how to listen to opera, nor how to enjoy it.

At the same time it must be borne in mind that to the very large majority of young persons their first introduction to opera raises a feeling of disappointment. People vary much, and there are those to whom the charm of music is so great that the most unfamiliar harmonies will convey delight to their ears and satisfaction to their minds. But this is exceptional rather than the rule, and it is to be feared that the neophyte, visiting the opera in a state of glorious ignorance, generally comes away with an inglorious feeling of unrealized ideals and unattained expectations.

To the average schoolgirl, for example, opera suggests various fascinating details read about in books and papers; such as beautiful singing, the presence of fashionable and brilliant persons; tiaras of diamonds and gorgeous costumes, and a thousand and one other trifles which may or may not come up to expectation. Even if they do, the excitement of such extraneous attributes as these soon palls, and the girl is left to reflect on the opera itself, which is perhaps the most fruitful source of disappointment.

We here assume (what we take to be generally the case) that the boy or girl paying a first visit to the opera has no real idea of what it will be; and in the excitement of the first entry into the large and brilliant house, with its crowd of well-dressed people, a series of miniature shocks awaits the novice.

For sake of example we may take an averagely intelligent and musical girl of sixteen. It does not take her long to discover that she can understand the meaning of hardly any word sung on the stage; a word or two here and there may be caught and mentally translated, but hardly sufficient, unless the girl be specially conversant with French, Italian, or German, to piece things connectedly together, or to gather enough to follow the sentiments expressed. A little natural irritation at not knowing what it is all about ensues.

The words not being caught, as they would be in an ordinary play in the vernacular, it is difficult to follow the story which is being unfolded; an ordinary stage piece may be intelligently followed by a deaf person by means of the eye, but in opera the situations must develop more slowly owing to the musical setting, and

there is generally, so far as stage work is concerned, a minimum of action; it is therefore quite possible for our young lady to leave the theater with the very barest notion as to the plot of the opera she has witnessed. Should the work witnessed be of a very popular character, such as "Faust," various numbers in the music will appeal to her ear as being pleasantly familiar; even in such a case as this, however, there will be much that falls strangely, while with the majority of works the music would be so new that only a confused general idea would be carried away. Not following either the language or the story, the music would be but another factor of confusion to our inexperienced girl, and especially would this be the case if the work presented were of a modern nature, or in a style to which she was quite unaccustomed in any phase of the art.

Such are some of the feelings experienced by young persons taken to the opera for the first time. First impressions are strong, and a feeling of distaste thus received may be hard to eradicate. Before considering how such wrong impressions might be prevented, or at least modified, we must again consider briefly what we go to the opera to hear.

It is not merely beautiful singing, for that can be heard more effectively from the same artists at a concert, when they are unhampered by the necessities of stage action, costume, and make-up. Nevertheless, there are those who are content at the opera with this alone; hence the popularity of certain Italian operas, the success of which depends almost entirely upon pure vocalization and expressive singing, with support of little in the way of stagecraft or dramatic truth. Nor is it excellent orchestral playing that is the main object, for that too can be better heard in the symphony of the concert-room. Nor is fine acting the main consideration—for that we must visit some temple of the drama; nor is it the wonderful development of stage appliance, the marvelous scenic displays, or electric lighting devices that call for comment: these can be better seen in some house mainly devoted to spectacular presentation.

It is none of these in particular for which we go to the opera, but rather for the combination of them all, which forms the characteristic feature of that complex aggregation of various arts of which opera is constituted. And seeing how many-sided and complex an art-growth it is with which we have to deal, small wonder is it that real appreciation for its numerous points comes but slowly, and only subsequent to experience, perhaps to study.

Now experience and study are just the things of which our imaginary young friend is quite unable to boast; hence the confused and mystified mental condition in which she, in all probability, leaves the opera house. Although easy to diagnose, the remedy for this state of things is more difficult to seek, but the following suggestions may be made:

First of all, make some attempt before going to the opera to master the details of the plot or story. There are many means of doing this. Librettos of all the operas are published, and the plot is plainly set out at the beginning.

So much done, some idea of what is taking place upon the stage can be grasped, and even perhaps some sentences of the libretto followed. Without such help, plots with so much movement and incident as even "Lohengrin" or "Siegfried" may be hard to grasp; but do not make the mistake of taking a copy of the music or libretto into the house with you; the auditorium is generally too dark to admit of their use, and even if this be not impossible, frequent cuts make following a difficult matter.

Having realized the plot, try to get some idea of the style of the music; that is, whether it is an opera of the older classical school (Mozart, Cherubini, Weber, etc.), in which case it will split up into airs, duets, finales, etc., with music somewhat in the manner of the familiar sonata; or if perhaps it be an Italian work (Rossini, Donizetti, Verdi), with the same subdivisions, but of a more tuneful and simple nature; or if a work of the grand opera school (Spontini, Meyerbeer), with massive stage effects and pompous musical utterances; or again, perhaps a modern work in the Wagner manner, with continuous non-divided music, and without definite tunes (melos and not rhythmic air). In this last case, one or two of the chief *Leitmotiven* might be memorized, but we would not advise this class of opera for a first experience; it is too advanced. In any case, do not go without some clear idea as to the manner and style of the music to be listened to. If any of the work can be played through and made at all familiar beforehand, so much the better.

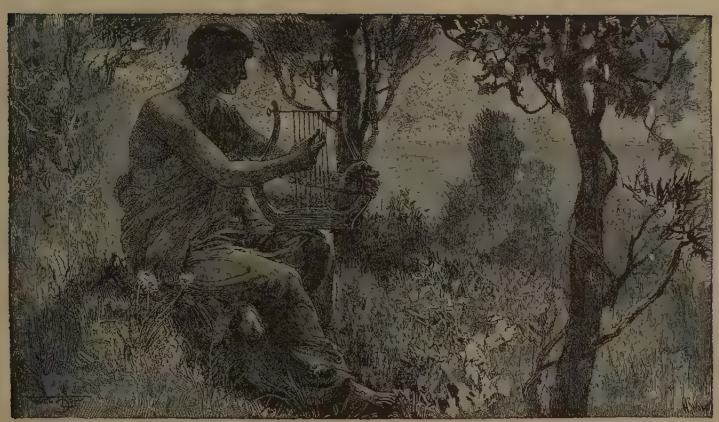
With some sort of nodding acquaintance with the plot and the music, enjoyment may be attained if the work be not too complex. Even then it is not very easy to appreciate an opera at a first hearing. If opportunity arises for a second visit to the opera house, choose the same work that you have already heard. A first visit does little more than create an impression; a second visit will renew old impressions and convey further ones; a third visit would enable one to be on the lookout for parts which have made special appeal; a fourth visit would, as a rule, bring thorough enjoyment, provided the work be well performed.

Of course there are some operas which can be easily appreciated at a first or second hearing, but these are the great minority, and we would suggest four visits before any judgment is passed. For an ordinary amateur to hear a new work and either praise or condemn it extravagantly is nothing short of presumption. The more experienced and capable the critic, the more reserved is his judgment. For the more complex operas, four visits, unaccompanied by private study or by rehearing of the music, would be insufficient.

Begin with simple operas. Such works as "Faust" and "Carmen," the tunes of which are already known to a large extent, at once suggest themselves; and perhaps in the same category, although in a very different class, may be placed "Lohengrin" and "Cavalleria Rusticana." After a course of easily grasped works, more exalted creations, such as "Don Giovanni," "Fidelio," and "Die Meistersinger," may be approached; and finally we come to the serious works of Wagner's "Ring," such operas as "Tristan und Isolde," the beauties of which are a sealed book to the inexperienced and the unmusical. As is the case with every phase of every art, real appreciation can only spring from real comprehension. That which is not understood cannot be fully loved and enjoyed. There must be a beginning and a gradual growth. Love for opera

is hardly an inborn gift; rather is it a cumulative force, fed by an ever-increasing knowledge, and by ever-widening critical faculties. To love music—as singing, or an orchestral performance—does not necessarily imply an ability to care for so polymorphous a work as opera, which must be a thing of separate study, the more difficult in that it demands attention from so many points of view.

And when knowledge and experience are to some extent gained, become not too critical, for that mars enjoyment. Those whose love is freshest for opera are not those unhappy critics who must perforce write a long analytical account of a new work before the final curtain has fallen upon it, but rather those who have grown to cherish the musical phrases for their own sake and for their inherent beauty, irrespective of who may be singing them, provided the singing be good and correct. Love for opera, although not lightly gained, is also not lightly lost; it is a taste that endures and strengthens as time goes on and knowledge deepens. It may well become and continue an important element in personal and artistic culture.



III. LEARNING TO LISTEN TO MUSIC

By Gustav Kobbé

1. AT A PIANOFORTE RECITAL

The Audience—The Piano—The Pianist—Evolution of Programme-making—Counterpoint and Harmony—Paderewski's Programme—Preëminence of Chopin—Schumann and Liszt Represented—The Encore—Effect of the Recital.

I LIKE to be in my seat in ample time, for I enjoy watching the audience arrive. There are the young women enthusiasts who preëmpt the front seats weeks beforehand, yet are among the earliest in their places, so as to luxuriate by way of prelude in the assurance that, from their coign of vantage, they can watch every movement of their idol's fingers as they glide over the keyboard. Many of these young women are endowed beyond the average with good looks, and the poetic light which shines from their features adds to their attractiveness. It must be an inspiration to any pianist to feel this band of sympathetic, responsive worshipers eagerly hanging on every note that shapes itself under his hands!

Next to come are the musical pupils of the girls' boarding-schools, who range themselves in the choice seats of the balcony. Then the suburban music-lovers with bundles—for they have done their shopping before the concert—and they keep them on their laps instead of placing them out of the way under the seats, fearful lest they forget them in the transport of enthusiasm after the last encore. No sooner are they settled than they begin to wonder whether, after all, they can sit through the entire recital and still have time to catch the last train before dinner. Great, indeed, is the hardship of being a lover of music in the suburbs! Finally the veteran concertgoers appear and drop into their seats with the air of people who know beforehand just what is going to happen.

Meanwhile the stage has remained empty save for the pianoforte and the pianist's chair, and as I look at the instrument—a huge harp in a rosewood case and placed in a horizontal position on legs—I ask myself what the virtuosos of the olden times would think could they return and press their fingers upon the keyboard of the instrument which has been developed from the spinet, harpsichord, and clavichord of their day. How mellow the tone, how superb the volume of sound would seem to them compared with the twang produced when the quilled or leather plectra of the spinet and harpsichord plucked the strings of those instruments, or with the gentle tinkle which resulted when the metal tangents set the strings of the clavichord in vibration! They were small instruments compared with our pianoforte, and if placed beside it today they would look as if the modern instrument could swallow them—"eat 'em alive," in the words of Mr. Warfield in "The Music Master." But they were richly decorated, which our pianos are not; and very handsome some of the women of the olden time looked when they sat at spinet, virginal, or clavichord and ran their slender fingers over the keys. Nor must we forget that it was in front of one of those instruments Mozart was placed as a child when he charmed the court of Vienna with his playing and, unabashed, responded to the Empress's praise with a hug and a kiss.

But these reflections are interrupted by the opening of the door giving from the stage. There is a moment of hushed expectancy followed by suppressed merriment. For, instead of the virtuoso, an attendant ambles across the stage to the piano, raises the top, pretends to be placing the chair in position (from sheer force of habit, I am sure), and retires. He is so hardened to the ordeal that he pays no attention to the few foolish people who attempt to start a round of mock applause, for he knows that when they discover no one is imitating them they will look even more foolish than they really are—if that be possible.

Suddenly, however, there is a prolonged salvo of genuine applause. The hero of the occasion has emerged and is making his way to the instrument. Is it the popular idol with the aura of reddish gold; or the little Titan whom Liszt dubbed "the young Tausig"; or the "Sarah Bernhardt of the pianoforte," as Fanny Bloomfield-Zeisler has been called? These sum up in themselves the three types of piano-players. The first, Paderewski, the man of deep thought and deeper emotion, who plays the piano like an inspired poet. The second, Eugen d'Albert (with whom also I class Rosenthal), a prodigious technician. The third, the woman, impulsive, nervously energetic, highly poetic—"and yet a woman!"

Upon the type will depend the programme. D'Albert once played at a single recital five Beethoven sonatas. It was colossal, but smacks to me too much of the professional "strong man" who lifts chairs, tables, and even a piano with his teeth. I have witnessed a great change, a veritable evolution to programme-making, since I began attending concerts. Like all evolutions it has been conditioned largely by environment, which in this case is the development of piano technique not only for brilliancy, but, what is far more important, for expression, begun by Chopin, built upon by Liszt and, in our immediate day, extended by Paderewski, who, if not the discoverer of the effect secured by using both pedals at once, was the first to systematically apply it. Producing a low, sweet tone with the soft pedal, he enriches and sustains it by simultaneously depressing the loud pedal, which, thus used, is not a loud pedal at all, but in the truest sense a means to beautiful expression. Our own foremost composer, Edward A. MacDowell, not infrequently di-

rects, in his pianoforte works, the simultaneous use of both pedals.

When Rubinstein and Von Bülow first came over here, in 1872 and 1875, a pianist's reputation rested on his playing of the Beethoven sonatas. It is herein that the greatest change in programme-making has taken place, for it is now recognized by all save the "old guard," that dies but never surrenders, that however noble the Beethoven sonatas may be as music in the abstract, they were orchestrally conceived, hence fail to do justice to the technical and emotional resources of the modern pianoforte.

Beethoven was a pianist, but when he wrote for piano he thought for orchestra. Moreover, the sonata form, as the term *form* implies, imposes restrictions from which the modern romantic school happily is free. This brief characterization must suffice here as a statement of the reason why in the evolution of programme-making more and more room is given to composers like Chopin, Schumann, and Liszt, who understood the possibilities of the pianoforte, and to their successors. A modern audience—very justly, it seems to me—is inclined to rank a pianist by his interpretation of these composers rather than by his playing of works which sound more like orchestral compositions arranged for the pianoforte.

If, however, the recital you and I are attending together—a recital, say, by Paderewski—opens with a composition by a master born nearly a hundred years before Beethoven, a fugue by Johann Sebastian Bach, that is because Bach's works for clavichord, although written for that antique instrument, sound wonderfully rich on the pianoforte. For Bach wrote in counterpoint, a term which sounds abstruse yet is, I think, capable of an untechnical explanation. Suppose that four people have met in order to sing. A composer hands to each of them a separate theme and then asks them to sing these four separate themes together. They smile somewhat superciliously, for they think it can result only in frightful discord. But the composer, who is sure of his ground, urges them on and, when they make the attempt, they discover that the four themes combined make a grand and impressive whole. That is counterpoint—the separate working out of separate themes which, nevertheless, bear such a relation to each other that they make a musical whole when sung or played together.

If the composer had taken only one theme and supplied it with an accompaniment, however simple or elaborate, that would constitute harmony; and between the four themes worked out together and the one theme with an accompaniment lies, in a general way, the difference between counterpoint and harmony. If the four themes had been so adjusted as to allow them to enter one after the other, sometimes drop and come in again, and so on *ad infinitum*, we would have had a fugue, the highest form of counterpoint. Goethe once described history as a mighty fugue in which the voice of nation after nation becomes audible, and this may stand as a highly poetic definition of a very complex musical form. But the point which interests us at this Paderewski recital is that, wonderfully rich as modern harmony may be, it is no richer than old father Bach's counterpoint. In fact Bach is a remarkable instance of a genius who was more than a century and a half ahead of his time. Now, like a newly discovered celebrity, he is forging more and more to the front, and no virtuoso can afford to neglect him. He forms a broad and stable foundation upon which to build up a recital and enables the pianist to show that he possesses artistic dignity and reserve as well as the qualities which make for brilliancy or for highly emotional expression.

The initial impulse to the modern appreciation of this master of counterpoint was given by Mendelssohn, who in 1829 revived Bach's "Passion According to St. Matthew"—the first performance of that great choral work since its composer's death more than seventy-five years before! And speaking of Mendelssohn, I notice that Paderewski follows the Bach fugue, which opens his programme, with the "Spinning Song" and "Spring Song" from the "Songs Without Words." These "Songs Without Words" have their proper place in the scheme of musical evolution. Without them there would be a missing link, whereas they supply the gracefully arched bridge (and easy to cross) between the classical sonata and the modern romantic school of composition. Instead of consisting, like the sonata, of three or four movements, they are "single-piece" compositions, and their workmanship and success opened the eyes of composers to what could be accomplished in this line. The two examples on this programme are obviously melodious, written in a graceful and fluent style, none too deep, and have the usual Mendelssohn fault of verging too much on the sentimental. Yet they have their place, and at a recital may serve very well for the two lumps of sugar in the cup.

They are followed by a group of Chopin pieces—a polonaise, two mazurkas, a valse, and two études, one of them the so-called "Butterfly Etude." Paderewski revels in Chopin, possibly because, like himself, the composer was a Pole, but also, without doubt, because this virtuoso recognizes with almost every other pianist that Chopin is the greatest composer of pianoforte music. It was Chopin who gave distinct individuality to music for this instrument, and when we consider that a piano is almost a necessity in every household, the debt due the composer who, without exaggeration, may be said to have discovered pianoforte music can be fully realized. Pianistic expression became what it is under Chopin; the piano ceased to be an epitome of the orchestra and became a piano. He perceived that the instrument possessed characteristics all its own, and promptly proceeded to develop them to their full capacity. The music of Chopin is melodious, brilliant, dramatic, deeply expressive—it possesses every attribute of beautiful music. But what makes its beauty supreme among all the works for pianoforte written up to Chopin's day, is the fact that it is genuine piano music. His importance in the evolution of the art and in the development of piano-playing lies not only in his music being beautiful in the abstract, but further in his discovery of the distinct "piano tone-color," or clangtint, and in his method of so working out his rich harmonies that he produces a great variety of tone-colors.

It is impossible within the limits of this article to touch upon all the details of this master's exquisite art, and I must content myself with calling attention to one

of his most striking characteristics. Observe the groups of ornamental notes which occur so frequently on his pages. Bearing no exact numerical relation to the regular rhythm of the piece which throbs on below; broken up into figures of four, three, five, seven, nine, or almost any number of notes, yet to be played with a certain continuity, and still freely, so that the first and last notes of the whole ornamental phrase fall in with the corresponding notes of the rhythmic figure; shot through with "accidentals" as with all the colors of the rainbow—it floats like a shimmering veil of gossamer over rhythm and melody, rising and falling on every breath of air. This is the famous, much discussed tempo rubato of Chopin; and it is this device more than any other through which this genius brought the piano into its own.

The Chopin group of pieces on the recital programme is followed by a Schumann group—a couple of Noveletten and Phantasiestücke, genuinely romantic works, appealing to the imagination and thoroughly delightful to play and to hear. They are admirable compositions, not too long, yet full of poetic touches. Schumann went even a step beyond Chopin in naming his pieces. Each of the "Fantasy-Pieces," for instance, has a descriptive title showing that it represented a certain mood to the composer and that he aimed to rouse the same mood in the listener. Thus one of the pieces is called "At Evening," another "The End of the Song." They are examples of so-called "programme music," music written with the distinct purpose of suggesting what the composer had in mind; and, in the evolution of music, Schumann may be said to represent the introduction of this type of composition to the piano. He further differs from Chopin in being less ornate, also in that he imparts to his music what I may call a barytone quality of tone and in being more introspective.

Passing over several pieces as not essential to the point of view from which we are considering this recital, it is found that the virtuoso has elected to close his programme with one of Liszt's "Hungarian Rhapsodies." I said early in this article that Beethoven thought for orchestra when he composed for the pianoforte; but his piano was a colorless orchestra. Liszt had supreme command both of the orchestra and of the pianoforte in their full modern development; and in writing for the piano, he reproduced orchestral effects with all their rich tone-colors. While listening to this "Hungarian Rhapsody" you will seem to hear piccolos, flutes, clarinets, horns, and other orchestral instruments, just as you become conscious of the colors of a painting when examining a fine mezzotint engraving of it. At the same time the composition is thoroughly playable. This enrichment of the resources of the instrument through the medium of orchestral effects is Liszt's contribution to the evolution of pianoforte music, and is, it seems to me, a great achievement. For Liszt sums up everything that went before and adds something of his own. Notwithstanding many divergent opinions, he is one of the great masters of music.

And now the recital is over—at least, is supposed to be. But something quite extraordinary happens; or rather, what should happen doesn't. Instead of the audience filing out, a great part of it crowds down the aisles toward the stage. The virtuoso of the reddish-gold aura appears again and again in response to the prolonged applause. At last there is a rapturous swell in the volume of acclaim. He is crossing the stage to the piano. To the delight of the great gathering, chiefly feminine—woman always, since the world began, being the leader in the appreciation of art—he plays one piece after another.

He retires. Many still linger and endeavor to coax him out again. But the lights are turned down, a signal that it is all over.

The young women in the front seats have had an afternoon of emotional revel; the boarding-school misses have heard how a great virtuoso plays the Chopin valse which is supposed to represent Mme. Dudevant's pet dog chasing its own tail, and they will play it incessantly for the next fortnight; the suburbanites have missed their train but don't care; and the veteran concertgoers have added another golden hour to their precious memories. But how many among all these realize that, besides having been thrilled and entranced, they have heard how a great virtuoso plays the Chopin music?

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2. AT AN ORCHESTRAL CONCERT

The Shah's Appreciation—The Concert Orchestra—Wilhelmj at Bayreuth—Thomas's Keen Ear—The Slighted Flute—Other Instruments and Their Uses—Conductors.

WHEN I hear the orchestra tuning up, I am reminded of an amusing experience which a London orchestra had with the late Shah of Persia during that potentate's visit to the British capital. He attended a concert and sat there apparently unmoved, signifying neither by facial expression nor gesture that the music made the slightest impression upon him. When it was all over, however, he remarked that he had enjoyed the first piece on the programme and would like to hear it again. The orchestra promptly attacked it, but Muzaffar-ed-din angrily shook his head to indicate that it was not what he wanted; and so with several other numbers which the orchestra began to try over. But when, after a while, it became necessary for the players to tune up again, and the babel of sounds attendant upon that function was let loose, a pleased expression overspread his august Majesty's countenance and he despatched his grand vizier to pin upon the lapel of the conductor's coat the Order of the Victorious Humming Bird.—After all, much depends upon the point of view.

The modern concert orchestra consists of many instruments—one hundred, as in the case of the New York Philharmonic; two hundred and forty-two, as in the case of the festival orchestra which Theodore Thomas conducted in the Seventh Regiment Armory, New York, in 1882. But when played on by a great conductor it should sound as one instrument, combining all the qualities of the many—the precision, sustained tone, and sensuous charm of the strings; the lusciousness of the wood-wind; the sonority of the brass; and the rhythmic pulsing of the instruments of percussion.

It should possess all the qualities of a great voice—be as brilliant and flexible as a high soprano, as rich and heavy as a contralto, as vibrant as a tenor, and as powerful as a bass. The modern orchestra is, in fact, the greatest of all voices, because, properly managed, it has a capacity for utterance far beyond the range and variety of any human voice, however great.

It always interests me to watch an orchestra assemble on the stage; there are so many instruments, yet they naturally form themselves into homogeneous groups, each with its own characteristics, but by contrast or fusion contributing its share toward the general result. To observe how an orchestra is constituted and how each part is made to subserve the whole is a fascinating study and a great aid to the due appreciation of orchestral music. Three groups, each of four different instruments, together with the instruments of percussion, or four groups in all, form the modern orchestra. It is well to bear these grand divisions in mind. It greatly simplifies the study of orchestral music and enhances the listener's pleasure in it if he can so familiarize himself with the characteristics of the different instrumental groups that he can at once locate the source of a certain tone-color or effect. To know at once what instrument is playing a melody that entrances your senses is like being able to distinguish a flower by its perfume.

Excepting the instruments of percussion, which consist of the kettledrums (tympani), side-drum, cymbals, triangle, and instruments of similar kind, each of the groups of which the orchestra is composed can play in complete harmony. For in each group there are instruments corresponding in range with the soprano, alto, tenor, and bass voice. One might say that a musician in scoring for orchestra has three orchestras at his disposal, and it is by his judicious use of them, sometimes independently, sometimes together, that he is able to secure those wonderful tone-colors which are the glory of modern orchestral music.

The violin is the prima donna of the orchestra. The tones of the wood-wind and brass, being produced by the breath, cannot be attacked with the same precision nor be sustained as long as those of the stringed instruments. With these latter the upward and downward strokes of the bow resolve themselves into one continuous motion which, for all practical purposes, can be kept up indefinitely, and may be as long drawn out and sustained as the murmur of night or as rapid and scintillating as the flash of the morning sun in the mirror of the sea.

It is not exaggerating to declare that the precision of an orchestra's attack and its brilliancy depend upon its first violinists. When Wagner produced his "Ring of the Nibelung" at Bayreuth, he had no less a virtuoso than Wilhelmj at the head of the first violinists. He was the Concertmeister, the leader of the orchestra, as the leading first violin is called in distinction from the conductor. Often there are ticklish problems of technique to be solved for the violins, and it then devolves upon the leader to show how these problems are to be solved. When "Die Walküre" was given at Bayreuth, the whirring passages for violin in "The Ride of the Valkyrs" seemed at first impossible to play. It was Wilhelmj who told the violinists under him that, so long as they began and ended each passage together, the middle would take care of itself—and so the result proved. It also is desirable that the bowing in each division of the strings should be uniform, not only because it would offend the eye to see some players in one of these using the up stroke, while others were doing the opposite, but also because it gives greater evenness to the body of sound. It is on record of Theodore Thomas that he stopped an orchestra at rehearsal because, his sensitive ear telling him that something was wrong, he discovered that one of the sixteen cellists was bowing the passage differently from the other fifteen! But there are very few conductors whose hearing for beauty of tone quality was as keen as was Thomas's. In his early days Thomas was a violinist, and I have seen him at rehearsal take the leader's violin and show the first violinist how to execute a passage. He had retained enough technical skill from his old virtuoso days to be able to usurp the functions of the Concertmeister.

Each of the three principal groups of the orchestra is spoken of as a quartet—the string, the wood-wind, the brass quartet. Strictly speaking, the strings, although playing only four instruments (violin, viola, violoncello, and double bass), form a quintet, because of the division of the violins into first and second. The first violins are the sopranos, the second the altos, the violas the tenors, the violoncellos the barytones, and the double basses the bassos of the string division. The numerical superiority of the violins as compared with the instruments in the other groups extends also to the other representatives of the string division. Again, taking the Boston Symphony Orchestra of eighty-seven players as a standard, there are, besides the thirty violins, ten violas, ten violoncellos, and eight double basses —an aggregate of fifty-eight stringed instruments, or two-thirds of the entire orchestra. This gives an idea of the importance of the strings. If, other conditions being favorable, an orchestra sounds rough and noisy, the cause usually will be found in a lack of due preponderance in the number of stringed instruments. The average theatrical orchestra nearly always is miserably balanced as between the strings and the other instruments, hence is raw and blatant.

The leading instrument of the wood-wind division is the flute, an instrument which long has been the victim of the musical joker. There is a stock jest which runs as follows:

"Are you musical?"

"No; but I have a brother who plays the flute."

For a man to suggest any subtle connection between music and his brother's playing the flute is supposed to mark the climax of lack of musical perception. It also has been darkly hinted that in "Lucia" the heroine loses her mind not because of her forced marriage to Ashton, but because her principal solo in the opera is accompanied by a flute obbligato. Nevertheless the flute is an agile and graceful instrument, and some of its notes give a tinge of romance to the orchestral color-scheme. One of our best-known Southern poets, the late Sidney Lanier, played the flute in the orchestra of Peabody Institute, Baltimore, and in his poem "The Symphony" he did not fail to pay a tribute to his favorite musical instrument.

The oboe is a wood-wind instrument which can be distinguished by its peculiar tone—reedy, almost nasal, yet, singularly enough, not disagreeable. The oboe was developed from the old pastoral pipe known as the shawm, and its pastoral quality still is so distinctive that it almost invariably carries the melody in music of that kind. It is, however, also capable of a plaintive expression and of voicing lonely melancholy. This latter is the special province of the English horn, which, in spite of its name, is simply an oboe of lower register. Undoubtedly the most characteristic and most famous passage for English horn is the sad lay piped by the watchful shepherd in the third act of "Tristan und Isolde," signifying to the wounded, feverish Tristan that the ship bearing Isolde to him has not yet been sighted in the offing.

Richer, warmer, and more mellow in tone-quality than the oboe is the clarinet.

> Then from the gentle stir and fret
> Sings out the melting clarionet,
> Like as a lady sings while yet
> Her eyes with salty tears are wet.

The clarinet is, in fact, one of the most beautiful instruments in the orchestra. It can be played rapidly or slowly and is capable of great variety in dynamic shading. Indeed, with all its beauty of tone and expression, it is so thoroughly practical from a technical standpoint, that, in military bands, such as Gilmore conducted at Manhattan Beach—"music on the half-shell" we used to call his concerts because of the shell-like sounding-board within which the players sat—the clarinets hold the place of the violins in the orchestra.

In "The Ancient Mariner" Coleridge speaks of the "gay bassoon." Owing to a peculiar squawk in some of its tones the bassoon sometimes is funny and can be used with humorous effect, but never, by any stretch of the imagination, could it be called gay or abandoned. There is also a contrabassoon, which is of even lower register than the bassoon itself. It is a large instrument, and if you see a very long pipe protruding above the orchestra, with such a lavish outfit of nickel joints and other trimmings that it reminds you of a section of sanitary plumbing, you are gazing upon the contrabassoon. The English horn, bass clarinet, contrabassoon, and piccolo (a small shrill flute) are additions to the regular wood-wind quartet. With the original quartet of wood-wind instruments they enable a composer to use the wood-choir in numerous combinations with itself and to produce a variety of exquisite tone-colors. The voice of the wood-choir as a whole is exceedingly rich and tender, breathing romance and gentle melancholy.

The regular brass quartet of the orchestra consists of trumpets, for which, however, cornets usually are substituted; French horns, trombones, and the tuba. The appearance of the first two members of this group is familiar to most people. The tones of the trombone are produced by drawing a long slide in and out. A facetious concertgoer once remarked that it always amused him to watch the trombonists because they kept swallowing half of their instruments and then drawing them out again, which he considered a very clever trick. The tuba is a large, thick, heavy-looking brass instrument ending in a funnel or "bell" of such dimensions that you wonder if it isn't necessary for the player to exercise considerable caution so as to avoid falling into it. The instruments of percussion most generally found in an orchestra are the tympani (kettledrums), the snare drum, bass drum, cymbals, and triangle. Castanets, tambourine, gong, and steel bars of varying length for bell-effects are added as occasion requires. The main function of the "battery," as the group of percussion instruments is called in the United States, is to add to the power (not to say noise) of the orchestra in mass effects, but it can, of course, be used in other ways, and a suggestion of mystery is not infrequently thrown out by a very delicate roll or tapping on the tympani. These and the bells are the only instruments of the group capable of being tuned to notes of definite pitch, the other instruments of percussion simply producing sound.

The conductor of an orchestra was originally a mere perfunctory time-beater. His individuality did not enter into the performance at all. A great change has, however, come over this state of affairs, and especially in our own day, when a conductor's reading of the works given under his direction has assumed as much importance as the injection of a virtuoso's personality into his playing. As a result we now have virtuoso conductors, often spoken of as "star" or "prima donna conductors." The New York Philharmonic Society, doubtless taking a hint from the popularity which its concerts enjoyed under Theodore Thomas and later under Anton Seidl, for several seasons imported its conductors from Europe, giving to each of them the direction of one or more concerts. Wassily Safonoff and Felix Weingartner were among those who were heard at the Philharmonics under this plan, Safonoff finally becoming the permanent conductor, to be succeeded by Mahler. In this country we also have a family of conductors in the Damrosches, the late Dr. Leopold Damrosch and his sons, Walter and Frank. Nikisch, who was conductor of the Boston Symphony Orchestra, is now one of the great "star" conductors of Europe.

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3. AT A SONG RECITAL

Bad Enunciation—Literary Qualities of Songs—Music and Words—The Old Recital and the New—Programmes—Schubert the Master of Song—Other Song-writers.

AT many of the song recitals which I attend I feel compelled to agree with those students of the evolution of language who believe that song antedated speech. For the number of people who seem to find it impossible to control their impulse to burst into song before they have mastered the distinct enunciation of their mother tongue is surprisingly large. To hear some of the men and women who figure as concert singers declare that "My-ee Lee-ove is lee-ike the red, red rr-rose" leads to the inevitable conclusion that they have cultivated the art of song without the preliminary precaution of forming so much as a speaking acquaintance with their own language. Is it to be wondered at that, when they essay to sing in foreign tongues, they

make mistakes which are even more ludicrous? I once heard the familiar line in Schubert's "Erlking,"

> Er hält in den Armen sein ächzendes Kind
> (He holds in his arms his groaning child)

declaimed,

> Er hält in den Armen sein achtzehntes Kind.
> (He holds in his arms his eighteenth child).

The eloquence with which the vocalist attributed eighteen children to a father who already had enough to worry him without such an uncalled-for increase in his family, made the mistake all the more ludicrous. The fact is that English as She is Sung (not to mention other languages) often is quite as bad as English as She is Spoke.

Unfortunately audiences are apt to be uncritical in such matters, so it is not unlikely that people will continue to sing before they know how to speak, and charge others from a dollar and a half to five dollars, or more, a seat for the privilege of hearing them do so.

I know of only one circumstance which affords reason for hope that some day singers will pay attention to clear enunciation of the words they are singing. This is the growing importance which composers attach to the literary quality of the poems they choose for musical setting. It has been said that Schubert's gift for melody was so spontaneous and versatile that he could have set a great song to a sign-post; which is also a suggestion that his genius worked so rapidly and was so voracious that it was not discriminating enough in some of the material it seized upon for assimilation. Be that as it may, there now is an obvious tendency on the part of song composers carefully to weigh the merits and suitability of a poem before setting it to music. Furthermore, the musical creator of to-day strives for a complete union of music and words. Changes of rhythm and of harmonies and numerous other subtleties in musical effect are employed as never before in the history of the *Lied* to denote sudden variations in mood and feeling as described in the poem. The modern song is becoming more and more like a very compact music-drama, sometimes tragic, sometimes tenderly pathetic, sometimes humorous. Obviously the effect of songs modeled on such lines will be greatly enhanced if the audience understands what they are about. Possibly singers will come to appreciate this point more generally than they now seem to do and will devote some attention to the diction of a song instead of taking it for granted that all that is required of them is to sing. And let me say here that there is no better method for a singer, amateur or professional, to acquire the desirable accomplishment of distinct enunciation than a few months' course at a regular dramatic school, where he will also learn numerous little nuances of pose and facial expression which tell with an audience. Many singers are deplorably deficient in "presence" and in mobility of feature.

To-day, when I look over the programme of a concert which will last about an hour and a half, and in which everything will be interpreted by one singer, I cannot help recalling that the song recital as a popular form of entertainment has come up during my own experience as a concertgoer. Formerly concert singers figured in one or two numbers with orchestra, in oratorio concerts, in miscellaneous vocal programmes, as soloists at choral concerts, or in conjunction with pianists or other instrumental virtuosi. Now, however, the Lied or song is generally recognized as one of the most beautiful forms of composition and the fact is appreciated that some composers have done their best work in this form. As a result we have to-day programmes wholly made up not only of songs, but sometimes even of songs by one composer—a Schubert recital, a Schumann recital, or a Richard Strauss recital. A few years ago George Hamlin, of Chicago, the first singer in this country to make a specialty of Richard Strauss, gave three recital programmes entirely made up of that master's songs. Georg Henschel, who is an accomplished pianist as well as a singer, and who plays his own accompaniments in a most sympathetic and musicianly manner, frequently has Schubert or Schumann programmes. So has David Bispham, speaking of whom reminds me that of late years the great opera singers have entered the song recital field and, without the interpolation of so much as a single aria or any other operatic piece, have achieved great success, showing that the Lied offers as fine a scope for dramatic expression as the works of the great opera composers. Lilli Lehmann, one of the grandest interpreters of the Wagner music-dramas, was among the first to make a detour from the operatic to the song-recital stage, and she filled Carnegie Hall again and again to overflowing with audiences which justly "went wild" over her Lieder singing. With her fine musicianship and her supreme vocal art, coupled with her instinct for everything which is at once musical and dramatic, she gave new significance to many songs which we had been accustomed to hear given in the tame "recital" style and opened entirely new vistas to interpreters of this form of composition. The same may be said of Mme. Sembrich. How different from the concerts I used to hear Christine Nilsson give when she considered it necessary to have the "assistance" of an instrumental quintet, a pianist, and several other singers, and her own selections were mainly operatic. This was the old-fashioned way of doing things when a great prima donna gave a concert. Now we want songs, and do not care to hear any one besides the prima donna herself.

Varying degrees of taste are shown in the arrangement of programmes for song recitals. Sometimes an overambitious singer will arrange a programme which in itself is admirable, but is ill-chosen because far beyond his powers. He forgets that, while there is some virtue in singing a song of average merit well, the greater the song the greater the crime in singing it badly. This is something which the average amateur, too, might well remember. A simple little ditty well sung is, in its way, an artistic achievement; a masterpiece crudely rendered is butchery. Some programmes, as given by some people, constitute a new massacre of the innocents.

Recital programmes include the miscellaneous programme in which the selections range from classical or even primitive tunes to songs by living composers, so that one obtains what may be called a bird's-eye view of the development of song; the programme devoted to

a group of composers representing one epoch or one country, and the "one-composer" programme. In the case of the miscellaneous or historical programme it will be found that comparatively few of either the early or great classical composers are represented, and then usually by the same selections. The range of choice here is limited, the fact being that, until Schubert's day, the song was regarded as a trifle not worth bothering with. Haydn and Beethoven were symphonists, Mozart a composer of symphonies and operas; and the attitude of these musicians toward the Lied was so indifferent, that they produced but little in that form worth remembering. Schubert was the first among the great composers to make a specialty of the song, and, quite at variance with the usual rule in such matters, he not only was the pioneer in the art of song-writing but one of its greatest exponents. He died as long ago as 1828, but to this day his songs have retained their freshness. No one ever would think of speaking of them as old-fashioned, while at least one of them, "The Erlking," not only never has been surpassed, but never equaled. Incredible as the statement may seem, this was one of 144 songs written in a single year and when he was but eighteen years old! On one day of this year (October 14, 1815) he set eight poems to music. Such fervor of creativeness coupled with sustained merit never has been known, is unique in music; and I doubt if its like can be pointed out in any other art. Schubert was only thirty-one years old when he died, and he wrote more than 600 songs, besides many other works, and when, in the last sentence, I speak of "sustained merit" I do not wish to be understood as suggesting that all his songs are of even excellence. But no other composer has produced so many that are worthy the efforts of the greatest singers and no other is so frequently represented on "one-composer" programmes as he.

The rapidity with which Schubert worked fairly takes one's breath away. It appeared only necessary for him to read over a poem once in order to assimilate it musically. His friend Spaun relates that, visiting him one afternoon with another friend in Vienna, they discovered him reading Goethe's "Erlking" aloud. Book in hand, he paced the room, then suddenly sat down and dashed off the song as fast as his pen could travel over the paper. As he had no piano (he was too poor), the three chums hurried over to the training school for court singers, where Schubert had studied, and "The Erlking" was sung there the same evening and received with enthusiasm. Thus a great, I may say the greatest song, was the work of a small fraction of a day and was tried over almost before the ink was dry on the paper! The work of a youth in the first quarter of the last century, it still ranks as the greatest achievement in the art of song-writing. It seems to sum up everything that a song possibly can be, for it is melodious, descriptive, and thrillingly dramatic all in one. The wild ride of the father through the stormy night with his dying child in his arms, the coaxing voice of the Erlking luring the soul from the little body, the shriek of the child as unseen hands reach out and seize him, the climax when the father reaches his destination only to find that he is clasping a corpse—all these elements of the poem are depicted in the accompaniment and expressed in the vocal part. Schubert possessed in the highest degree the gift of singable melody combined with the power of reproducing in his accompaniments the descriptive suggestions contained in whatever poem he set to music. In his "To be Sung on the Water" the voice is borne along on a gracefully rising and falling, rippling figure in the piano part. "The Erlking" and "To be Sung on the Water" are admirable examples of the two different kinds of song. "To be Sung on the Water" is "strophic"—each stanza of the poem is sung to the same melody. "The Erlking" is "composed through"—the music closely follows the action of the poem and changes accordingly. It is a compact and powerful music-drama. Two other great songs by Schubert which are "composed through" are "The Wanderer" and "The Young Nun." In the latter the accompaniment represents a raging storm at night, above which the mournful tolling of a chapel bell is heard.—But it would require a book to do Schubert justice. Song, instead of reaching its fulfillment by a slow process of development, sprang full-fledged from his genius, and his greatest songs actually are more modern than any that have been composed during the more than eighty years which have elapsed since his death!

While Schubert's complete mastery of the song has precluded the slow process of evolution which can be traced in other musical forms, Schumann, Franz, Brahms, and, more lately, Richard Strauss have impressed their individuality upon the Lied. Liszt composed comparatively few songs, but among these there are such gems as "The Lorelei," "Thou'rt like unto a Flower," and "Knowest Thou the Land." Frenchmen like Godard, Massenet, and Saint-Saëns; Italians like Tosti; and Slavs like Tchaikovsky and Dvořák have written fascinating songs. But in the ultimate analysis, song as an art-form remains precisely where Schubert left it, an experience wholly at variance with that discernible in other branches of music, and a striking tribute to the genius of the composer of "The Erlking." That the art of song-writing did not come to a complete standstill after his death is due to the fact that it attracted some of the great masters who came after him as the most eloquent medium for expressing their most intimate thoughts. When Schumann fell in love with Clara Wieck, he promptly took the world into his confidence by composing more than a hundred songs. He and Clara were married in September, 1840. Previous to February of that year he had not written a single song, and after his marriage he lapsed into silence again for nine years. Few of these later songs equal the lyrical outburst of his "engagement" year. When he sent his first published songs to Clara, he wrote to her that when he composed them his soul was in hers. "Indeed," he adds, "no one could write such music without such a bride. . . . I could sing myself to death, like a nightingale."

When Schubert and Schumann are on the same recital programme it is easy to note the different points of view from which they approach song composition. Schubert's genius was so spontaneous that it converted poems into music, expressing the sentiment of the stanzas in clear and beautiful melody and portraying what may be called the scenic environment in a descriptive accompaniment. His inspiration seemed something quite apart from his own life and experi-

ence and not to be in the least degree governed by them. It appears to have been something which existed entirely outside his own personality, like the higher, spiritual self, which some dreamers claim begins where our own bodies leave off. Schumann's songs, on the other hand, are in the highest degree personal. He employed them as a medium for expressing his own moods, sometimes in the vocal part, sometimes in the accompaniment, which not infrequently predominates too much over the voice. They are intimate communications between the composer and his public—letters of song marked "personal" and delivered by the singer to the listener.

For lack of space what I have said of Schumann must, in a general way, stand for a minute characterization of the song-composers who followed Schubert. Franz is even more personal than Schumann, Brahms than both of them put together; Richard Strauss, in addition to intimacy of expression, has enriched song with the scheme of ultramodern harmony which he adopts in his orchestral works. Schubert, however, still remains supreme among song-composers, and great as would be the calamity if every song composed since his time were to be lost, it still would be possible for recital singers to make up Schubert programmes by the dozen. Only thirty-one when he died, and over 600 songs! What a heritage for us!

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4. AN EVENING AT THE OPERA

Opera as an Art-form—Some Ridicule of It—Music and Libretto—Liberties Taken by Singers—Italian and German Opera—Meyerbeer's Operas—Importance of Dramatic Librettos.

ALTHOUGH the gentle Miss Austen was roused by the obvious incongruity of opera as an art-form to remark that "if an opera were rational it might be a better thing, but would not be nearly so like an opera," it still remains the most expensive form of musical entertainment. Indeed there is such a thing as acute operamania, an epidemic to which thousands succumb every year. I know a lady, wholly rational in other respects, who remarked somewhat testily when her husband providently laid in ten tons of coal at the then low rate of five dollars, that the cost of the coal would have paid for ten opera tickets. For such a well-defined case of operamania even the mosquito theory of germ propagation offers no satisfactory explanation. All we can say is that there must be an opera microbe as yet insufficiently understood, under whose insidious influence people otherwise perfectly sane cheerfully pay five dollars for the privilege of sitting in an orchestra stall and listening to something in a language they cannot understand.

It is a fact that from the days of Addison to the present time opera has afforded satirists a fine opportunity for the exercise of their talents. An art-form in which five minutes and innumerable trills and roulades are required to sing "I love you," a phrase which often can be spoken, with the desired effect upon the person addressed, in less than two seconds, obviously differs from the ordinary methods of human communication. Had the Russian and Japanese envoys at Portsmouth conducted their negotiations according to the operatic formula, I am quite sure that M. Witte still would be singing, "Not one kopek!" or the Japanese still intoning the first protocol. Opera is, in fact, delightfully untrammeled by ordinary considerations of time and space. Thus Andrew Lang facetiously calls attention to the fact that "Aïda" is cast at large in the wide period "when the Pharaohs ruled over Egypt," say 5000 years; while, regarding the entrance of Valentine in "Les Huguenots"—"a veiled lady is led through the room into the gardens on which the window opens"—Mr. Lang's comment is that "a secret visitor would naturally enter the gardens in this, the only conspicuous and compromising way, instead of going around outside. Otherwise there would be no plot; besides, this is the most absurd method possible." As for the plot of "the celebrated 'Trovatore,'" Lang confesses that it produces on his brain much the same effect as a page of algebra, "or one of those elegant Babylonian records on clay, which look like chocolate inscribed in cuneiform." Regarding this same "Trovatore" my personal experience was that, after hearing it for the twelfth time, I knew no more of the story than at first, whereupon I conscientiously read through the libretto from cover to cover, with the result that I knew even a little less about it than before. Indeed, it is just as well not to inquire too closely into the "book of the opera." As a rule it is apt to teem with absurdities.

The main consideration in opera is the music and the manner in which it is sung. This is true even of the Wagnerian music-drama, which, however, is to form the subject of a separate article. Many of the incongruities of the average opera libretto vanish under the charm of song. The "book" of Mozart's "Magic Flute" is nothing less than a monument of asininity, yet, owing to the beauty of its score, the "nine-prima-donna opera," more than a century old, still is the object of not infrequent revival—even when among the nine prima donnas in the cast all but two or three are only "prima donnas" in quotation marks.

Da Ponte wrote the libretto of "Don Giovanni" for a humorous opera. Even the apparition of the Commandatore at his murderer's banquet was to be a diverting episode. It was Mozart's genius that realized the thrilling dramatic possibilities of the scene and entirely changed its character from what the librettist had intended. It might be contended that three things are necessary to an opera—book, music, and performance—but in point of fact the three requisites of opera are: firstly, music; secondly, music; and thirdly, music. Given an inspired score, and the libretto counts for little or nothing. When Verdi composed "Un Ballo in Maschera" (A Masked Ball) the Italian authorities objected to its production because in it Gustavus III of Sweden is assassinated and it was feared that regicide on the stage would have a bad effect in the then uncertain state of Italian politics. Verdi calmly transferred the scene to Boston, and now whenever "Un Ballo in Maschera" is given it is Count Richard, governor of Boston, who is slain!

Of course Verdi's stage Puritans are ridiculous from a dramatic point of view, but this does not affect

the opera as music. What can be more unnatural than Violetta in "La Traviata," who is dying of consumption yet sings music of such brilliance and floridity that the rôle is a favorite one with all great coloratura singers? The public takes the singing at its full value and asks no questions about the libretto. In fact singers joke among themselves by substituting all kinds of ridiculous stuff in serious passages and singing it with all the abandon of dramatic passion. I myself have heard a great contralto as Siebel in "Faust," when singing the Flower Song, which begins,

Le parlate d'amor,
O cari fior!

(Tell her of love,
O precious flower!)

deliberately change these lines to,

Le patate d'amor,
O cari fior!

which means,

The potato of love,
O precious flower!

and sing this nonsense with as much grace and feeling as if it were the original lines, meanwhile surreptitiously winking at her colleagues in the wings or at the conductor. Marguerite receiving a potato as an offering of love quite destroys one's ideals. Fortunately but few in the audience ever are the wiser for aught that is sung from the stage, otherwise "Faust" and several other productions might degenerate into comic opera, and an evening at the opera might be something quite different from what it is supposed to be.

Doubtless singers would not dare to take such liberties with the libretto of an opera were they not assured of their supremacy in opera and that the public goes to hear them rather than the work in which they appear. "I am going to hear Melba to-night" (or Farrar, or Caruso), is a far more common phrase than "I am going to hear 'Lucia,'" or some other work. The average operagoer has the name of the singer rather than the title of the opera in mind.

Many writers on music have deplored the tendency of Italian opera composers to slavishly subject their art to that of the vocalist and to produce scores which obviously are intended to afford the interpreting singers every opportunity for the display of their brilliant vocal talents. It is argued that the dramatic significance of the words underlying the music too often is disregarded for the sake of introducing some senseless turn or ornamental passage to enable the singer to catch the applause of the audience by the exhibition of vocal pyrotechnics. I take an entirely different view of the matter. There are two schools of opera, the Italian and the German, each of which has served its purpose most admirably in the development of music. Melody which is obviously beautiful and singable is the strong point of Italian opera from the days of Donizetti and Bellini to Verdi. That the Italians sacrificed the artistic verities and especially dramatic truth to the singer is undeniable. On the other hand they performed an incalculable service to the art of bel canto, the art of beautiful singing. They did for vocalization what Paganini did for the violin and Chopin and Liszt for the pianoforte—they developed its resources to the utmost, both as regards sustained beauty of tone and brilliant execution. The result is that if you desire to hear the art of bel canto exemplified in all its branches, a performance of Italian opera by great singers is your best opportunity. Nor should Italian opera be neglected by instrumentalists. Theodore Thomas once told me that the exquisite singing quality of tone which he was able to draw from his orchestra he owed to the fact that, in his earlier days, while playing in and conducting Italian opera orchestra in New York, he had heard some of the greatest Italian singers who have visited this country. Thomas was a musician of broad and liberal views, and I always have considered this remark of his, made long after his eminence as a conductor of an entirely different style of music had been established, a significant acknowledgment of the influence which one phase of art may exert upon another, though they may seem wholly distinct. There are singers who, fortunately, are catholic enough in their ideas to seek inspiration from listening to fine instrumental music. One prima donna never misses an opportunity of hearing Fritz Kreisler play on the violin. She frankly says that his large tone, broad phrasing, and solid musicianship are of benefit to her in the practice of her own art. Such broad-mindedness is to be highly commended and affords an example which others might find it most profitable to follow.

Broadly stated, German opera differs from Italian in greater seriousness of purpose. Its melody is more richly harmonized, the orchestration is fuller, and it aims more at dramatic expression, even sacrificing, when necessary, vocal beauty to dramatic effect. The logical climax of this is the Wagner music-drama, something so different from what ordinarily is understood under the term "opera," that I have reserved it for consideration by itself, and here dismiss the subject of German opera with the comment that, while it is a profound and beautiful branch of the art of music, I doubt if it ever would have developed singers like Elizabeth Billington, Catalani, Malibran, Jenny Lind, Christine Nilsson, and Melba, not to mention Patti, who, as an exponent of the art of song, probably never has been surpassed. If Italian opera had accomplished no more than this, it still would have been worth while. But it has given us much more. Such numbers as the sextet from "Lucia," the quartet from "Rigoletto," or the Casta Diva from "Norma" are melodic flowers of the rarest perfume and worthy to be ranked with the musical inspirations of any nation.

Between Italian and German opera lie the works of Meyerbeer, whose fame is kept alive chiefly by "Les Huguenots," which was given during the Grau seasons at the Metropolitan Opera House with such brilliant casts that the performances still are spoken of as "the nights of the seven stars."

Although Meyerbeer was a German, to be more exact a German Hebrew, his best-known works were composed for Paris and come under the head of French opera, the French demanding dramatic ex

pression without sacrifice of the vocal melody, and more careful orchestration than the Italians. The introduction for violins to the last act of Meyerbeer's "L'Africaine"—the scene under the poison-tree—rarely fails of being redemanded. When first heard, it created quite as great a sensation as did the intermezzo from "Cavalleria Rusticana" twenty-five years later. There is much claptrap in Meyerbeer's operas—much sound with little meaning—but there also is good character-drawing through the medium of music, as in the case of Marcel, the old Huguenot soldier in "Les Huguenots," and of Nelusco in "L'Africaine," besides moments of thrilling dramatic interest such as the Consecration of the Swords and the love duo in "Les Huguenots."

An opera quite apart by itself, in fact unique, is Georges Bizet's "Carmen," which was produced in Paris in 1875, the composer dying a few months later and before its success was fully established. Its leading character, Carmen herself, is dramatically and musically one of the most strikingly drawn types in the whole range of opera, and the work is a perfect example of a singable score so plastically imposed upon a thoroughly well-constructed libretto that the music effectively follows every turn of the action. Full of fascinating and typically Spanish rhythms, and skillfully orchestrated, it preserves all the local color and atmosphere of Mérimée's novel. Little wonder that it was the favorite opera of so serious and profound a musician as Brahms, and that it furnished the rôle in which they achieved their greatest fame to at least two prima donnas—Minnie Hauck, who was the Carmen of the Mapleson régime, and Calvé, who through it won for herself as unique a position as that which the opera has gained.

When Verdi's "Aïda," composed to the order of the Khedive of Egypt, was produced in Cairo in 1871, it was found to be a notable departure from the composer's earlier style. In its more sonorous orchestration and less ornate vocal melody, as well as in its greater seriousness of purpose, people saw traces of Wagner's influence. Even more perceptible is that influence in Verdi's last works, "Otello" and "Falstaff." But whether the new school of Italian opera date from Verdi's "Aïda," Boito's "Mefistofele," as remodeled and given in 1875, or Ponchielli's "Gioconda," which was produced in 1876, a new Italian school there is, and its best-known exponents are Mascagni, Leoncavallo, and Puccini. The story often has been told of how Sonzogno, the Italian music publisher, offered a prize for a one-act opera and how a struggling young composer won the prize with a work which literally took the musical world by storm. The composer was Pietro Mascagni and the opera "Cavalleria Rusticana." It was the forerunner of the numerous short operas, mostly of the tragic and realistic order, which have been produced during the succeeding years, the best of them being Leoncavallo's "Pagliacci," which undoubtedly, like "Cavalleria," owes much of its success to the highly effective drama that underlies the score.

The same is true of Puccini's "Bohème" and "Tosca." In fact the choice of a dramatically effective libretto is now considered a matter of the highest importance with Italian composers, and the days when they would scatter gems of song on a literary rubbish-heap to be picked up by great singers and dangled before the public, dazzling its eyes in the glare of the footlights, is past. It must be admitted, however, that these modern Italians who stand up so valiantly for the dramatic verities of opera, do not appear to have the same spontaneous gifts of melody as their illustrious forerunners, and in fact it was shrewdly remarked of Verdi that his seriousness of purpose began with the decline of his melodic inspiration—that he became good too late.

Opera is a fashionable entertainment, so much so that when a New York impresario complained that the Bostonians did not patronize his performances in their city, some one wittily remarked that he did not give them with his full company, that he had taken his singers with him from the Metropolitan Opera House—but not his boxholders, a most serious omission. Then there is the story of the young woman at the opera who, on being obliged by a burst of song from the stage to raise her voice above the usual conversational tone, exclaimed: "Ah, Mr. Jones, what a bore! How delightful the opera would be if it weren't for the music!"

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5. AT A WAGNER MUSIC-DRAMA

Serious Anticipations—Performance at Bayreuth—Turning-point of Wagner's Career—His Early Supporters and Opponents—His Music-dramas not Operas—Outline of His Methods.

WHEN I attend the performance of a Wagner music-drama, I am able to note, even long before the orchestral players begin to emerge from the doors under the stage and take their seats, that the surroundings are quite different from ordinary opera. I do not, for example, hear some one behind me say that she thinks Tristan and Isolde "just too sweet for anything" or that Nordica as Brünnhilde "is such a dear." There is, rather, a look of solemnity about the gathering which denotes a feeling that something great is about to take place. To a Wagner music-drama there is a certain largeness of design and execution which presupposes some intellectual capacity on the part of the audience. It is not the occasion for flippancy or mere gush or for the exhibition of clothes. Wagner, thank fortune, is not fashionable. From three to four hours' close attention to a work of art which does not merely seek to tickle the fancy, but appeals to the deeper and nobler feelings of the listener, is too great a strain for "society," which, accurately gaging its own intelligence, contributes greatly to the success of the Wagner music-dramas—by absenting itself.

Unexpectedly—at least so it will seem to those not versed in the customs of Bayreuth—the performance will appear to have begun. For they will hear, although strangely distant and subdued, one of the motives from the work which is to be given. But it is only the call sounded in the lobby—as it is sounded at Bayreuth, but outside the theater on the terrace overlooking the town—notifying people that the per-

formance soon will begin and that they had better make sure of being in their seats before the doors of the auditorium are closed. For when the Bayreuth custom is observed at a Wagner performance, no one is admitted during the progress of an act. The call usually is played on horns, trumpets, and trombones, and is sonorous and solemn as befits the occasion.

As soon as the conductor of the orchestra has taken his seat and raises his baton, all the lights in the house are turned out except those at the desks of the players. The house is in darkness save for the shimmering depth, the sunken orchestra, between audience and stage. Now and then, however, one sees little lights, like will-o'-the-wisps, flitting through the auditorium. These are electric hand-lanterns carried by the ushers, who are conducting down the aisles people who had entered before the lights were extinguished, but had not yet been shown to their seats. This is a concession which Bayreuth does not make. There you must arrive in time to be in your seat when the lights are turned down, or stay outside. Nor are there standees at Bayreuth as here. At the performance I am attending, the second division of "The Ring of the Nibelung," "Die Walküre," it is quite evident there is going to be a packed house and that even the standees will be so numerous that the management will be obliged to put out the "NO STANDING ROOM" sign.

As I note this, I cannot help recalling that when Wagner composed "Die Walküre" he had no hope of ever seeing it produced. It was the fruit of an irresistible artistic impulse without even the incentive of possible success. His "Rienzi," composed along Meyerbeerian lines, had made a brilliant hit, showing that he might have scored one popular success after another, had he cared to cater to the public. But he was so much imbued with the idea that, if opera ever was to become what it originally was intended to be, a worthy drama worthily set to music, it must break away from the set forms established by the Italians and, above all, must cease to be composed mainly for the benefit of the singers—he was so firm in this conviction that he could not be satisfied with the furor created by "Rienzi." Accordingly he followed that work with "The Flying Dutchman," the somber beauty of which wholly failed of appreciation. It marks, however, the turning-point in his career. For, while it contains arias, duets, and other forms similar to those of Italian opera, though more seriously treated from a musical point of view, it also has certain typical melodies, forerunners of his system of *Leitmotiven*, or leading motives, which, in brief but melodious musical phrases, describe certain characters or certain emotional states and recur at corresponding points in the development of the action, thus giving an effect of unity and comprehensiveness to the work, which opera in the ordinary sense of the word lacks.

"The Flying Dutchman" was a failure, but Wagner, undaunted, followed with "Tannhäuser," which, simple as it seems now that it has been before the public for more than sixty years, was little less than an enigma to its early audiences. It was very slow in making its way, but the main point is that it made its way. For in every audience that heard it at least a few recognized a new greatness in music beneath the strange exterior and were willing to acknowledge that, if parts of the score were unintelligible to them, their ignorance and not Wagner's lack of musicianship was the cause. The persistent enthusiasm of such admirers, few at first but slowly increasing in number; Liszt's brilliant advocacy, and, finally, the friendship and the substantial aid of King Ludwig II of Bavaria, were, coupled with Wagner's own loyalty to his ideals, no matter how discouraging his circumstances, the main factors in his ultimate triumph, which, however, was many years in coming. "Lohengrin," which he finished in 1848, he did not hear until thirteen years later. In 1843 he had been made conductor of the opera at Dresden, but, having taken part in the insurrection of May, 1849, he fled to Zurich to escape arrest and was not amnestied until 1861. Wagner was not a political reformer. But opera on the Continent is largely a governmental institution, and Wagner hoped that a political revolution would benefit the art to which he was devoted. The episode shows that Wagner's life itself had become bound up in his ideal. Had he not succeeded in making his escape he would have been thrown into prison.

Dark indeed was the outlook for his future when he entered upon his long exile. Although Liszt produced "Lohengrin" at Weimar in 1850 and the performance made a stir throughout Germany, the real Wagnerites still were a small band of enthusiasts and Wagner's works were received with far more ridicule than praise. Until even a much later date they had to make their way inch by inch. There is a French cartoon which, not without much humor, it must be admitted, reflects the public opinion of the day regarding Wagner as a composer. It represents him as a dog running away with a tin can labeled "Lohengrin" tied to its tail. The cartoon is entitled "Music as a Mode of Motion," and the idea is that "Lohengrin" has the same effect on the public as the can on the dog. This was then as true of Germany, where every other girl now is named Elsa, as of France. If "Lohengrin," which compared with "The Ring of the Nibelung," "Tristan," "Meistersinger," and "Parsifal," is a simple work—almost an old-fashioned one—was so long in being understood, it is quite obvious that the prospect for Wagner's later scores must have seemed hopeless.

If before attending this performance of "Die Walküre" you have been wise enough to read over the words of what the street venders in front of the Metropolitan are pleased to call the "book of the opera," although "Die Walküre" is not an opera, you will discover that Wagner himself wrote the dramas he set to music. This is true of all his stage works, and is but another mark of his genius. He believed that music composed for the stage should not be the handmaid of trash, that music was too high and noble for such a menial office, but that it should be the crowning glory of a drama worthy of its high purpose. Wagner's dramas are not mere clever tricks of stage-craft. They are deep rooted in human experience and philosophy. Some profound truth always lies at their base and is illustrated by their action. His favorite theme was the redemption of man through woman's self-sacrificing love. It runs through "The Flying Dutchman," "Tannhäuser," and "The Ring of the Nibelung."

Wagner set dramas, not "librettos," to music; and

any one who attends the performance of a Wagner music-drama thinking that he will hear an opera is apt to realize his mistake before the performance has progressed very far, and it will probably puzzle him. At this representation of "Die Walküre" he no doubt will be greatly surprised, possibly disappointed, that, when Siegmund, weary and storm-driven, enters Hunding's hut he does not sing an aria; or that he does not join in singing a duet with Sieglinde when the latter, having heard sounds of some one entering, and thinking Hunding has returned, comes in from an adjoining chamber to find a stranger lying exhausted before the hearth. But if the listener is observant, he will notice that an exchange of questions and answers, growing out of the dramatic situation, takes the place of the set operatic melodies. Furthermore, if he is musical, he cannot fail to be impressed with the fact that the recitative in which the characters express themselves, while not in any of the set musical forms, is not unmelodious, and reflects, in a wonderfully vivid manner, the sense of what is going on on the stage. The orchestra too will interest him. Here is not a commonplace strumming. The noble collection of instruments is not relegated to the functions of a gigantic guitar. It too has a voice in the drama and accompanies every gesture, every note sung on the stage, with brief but significant phrases.

These phrases are the "leading motives" of the work. It was Wagner's invention of the system of leading motives and his perfection of it which enabled him to develop his theory of the music-drama. Every important character in the drama has his or her motive, a brief but melodious phrase which is not a mere label, but a musical expression of what the character stands for in the action. Moreover, certain emotional states and conditions, which have their part in the drama, also are expressed in leading motives. These phrases are compact, and pregnant with significance. Often by their employment coming events are allowed to cast their shadows before, or the past is tenderly or regretfully recalled. Not infrequently, when several characters, with the emotions and passions that sway them, are active in the development of the drama, two or more of the leading motives will be combined, so that the score is a brilliant and ever-changing woof of music, eloquently voicing at every point the action on the stage, and sometimes even what is in the thoughts of the characters. As an adjunct in accomplishing all this, Wagner developed the art of orchestration as no one before him; nor has any one since been able to draw richer, more sonorous, or more exquisitely delicate effects from an orchestra than he.

There is no better way of illustrating how Wagner has applied his theories than by following, up to a certain point, this performance of "Die Walküre." The short introduction depicts a storm. The curtain then rises upon the interior of Hunding's dwelling, the walls hung with the skins of wild beasts, the roof supported by the branches of an immense tree growing in the middle of the rough living room and kitchen. Such a scene never was shown in opera. It does more than merely dress the stage. It seems as much an integral part of the work as do the drama and the score.

When Siegmund, hunted by enemies, seeks refuge here from the storm and, staggering to the hearth, throws himself exhausted down before it, a sad, weary strain, expressive not only of his gait and mien, but also of the misfortune which has pursued him through life, is heard on the orchestra. This is the Siegmund motive. When Sieglinde enters and regards him with compassion, a brief phrase wells up from the score as spontaneously as the quality of mercy which is not strained—the motive of sympathy. As Siegmund and Sieglinde regard each other with growing interest, a strange presentiment of affinity is awakened in their breasts, a feeling that is voiced in the tenderly expressive love-motive. When in a voice trembling with emotion Siegmund tells her that misfortune follows him whithersoever he goes, and that lest it should enter her dwelling through him, he will depart, she bids him tarry. She too is of a doomed race, and he cannot bring misfortune where already it is at home. This race is that of the Volsungs, and the Volsung motive, which seems freighted with impending tragedy, is now heard.

I have briefly shown how, one after another and at the proper point in the action, several of the important motives have been introduced. When, after the outburst of feeling in which she bids him remain, they gaze at each other in long silence and with deep emotion, all these motives are combined in the orchestral accompaniment and with exquisite effect. They sum up the situation and lead over to the following scene, Hunding's return home, which is foreshadowed by his motive, a phrase as threatening as his own dark and forbidding visage.

The above is but a slight outline. It must, however, suffice for the purpose of this article to show how, in a Wagner music-drama, the music closely follows the varying episodes of the action. There are moments when great climaxes are reached in which Wagner resorts to melody instead of limiting himself to melodious recitation. In "Die Walküre" we have Siegmund's Love-song, the Ride of the Valkyrs, and Wotan's Farewell to Brünnhilde, followed by the Magic Fire Scene. But the briefer phrases, the leading motives, will each be found characteristically melodious and easily recognized as they occur from time to time in the score, as soon as the listener becomes fairly familiar with them. After a few performances of a Wagner music-drama one begins to anticipate these typical phrases, just as one anticipates the airs of a favorite opera. To me the leading motives of the Wagner music-dramas are as familiar as the tunes of "Lucia" or "Trovatore." The Siegfried Horn motive is my whistle for my dog—and the dog never has complained that its meaning is obscure!

One of the main points a person should remember at a first hearing of a Wagner music-drama is that he is not listening to an opera. If he were, all he would have to do would be to lean back in his seat and wait for the singers to come on and warble. The beauties of opera are of the obvious kind. In opera the characters wear their hearts on their sleeves. Between opera and music-drama there is much the same difference as there is between a Sardou play like "La Tosca" and a Shakespeare tragedy like "Hamlet." The dramas which underlie the scores of Wagner, and of which he himself was the author, deal with life in its most profound aspects. Although

their stories are laid in times far remote from our own, they are concerned with problems and emotions which ever swayed and still sway the destinies of men and women. Opera is entertainment, amusement. Music-drama is not, does not, in fact, aim to be. "The Ring of the Nibelung," for example, is the tragedy not only of a race, but of an entire prehistoric epoch. It is an elevated expression through scenic, dramatic, and musical art, by one of the greatest thinkers the world has produced, of his philosophy of life. Whoever attends it conscious that more will be required of him than merely to listen to fine singing —that he must make the intellectual effort to grasp it in its triple combination of scene, action, and music—whoever, in short, realizes at the outset that going to a music-drama is not "going to the opera," already has won half the battle.

6. CHAMBER MUSIC

Musical Purists—The String Quartet—Comparison of Chamber Music with Other Forms—Chamber Music of Great Composers—Schubert's Famous String Quintet—Unusual Instrumental Combinations.

LOVERS of chamber music form an extremely refined and cultured class, and, like all highly refined and cultured people, are very conservative. They are the purists among music-lovers, the last people who would care to see the classical forms abandoned, and they would be disturbed, and even shocked, by any great departure from the sonata form. For the string quartet is to chamber music what the symphony is to orchestra and the sonata to the pianoforte. It is, in fact, a sonata for two violins, viola, and violoncello, just as the symphony is a sonata for orchestra.

I speak of the string quartet because that is the most generally recognized combination of instruments for the performance of chamber music. There also are famous quartets of players. The best-known in this country is the "Kneisel." In Beethoven's time, in Vienna, Prince Rasumovski, a Russian amateur, maintained a quartet that bore his name and in which he played second violin, the other players being professionals. The most famous quartet of modern times is the "Joachim" quartet, organized and led, until his death, by the celebrated violin virtuoso, Joseph Joachim.

The intimate quality of chamber music is such that, actually, a pianoforte solo is more effective in a large hall than a string quartet, although the latter employs four times as many instruments; and the same is true of those pieces of chamber music in which the pianoforte is used, such as sonatas for pianoforte and violin or violoncello, pianoforte trios, quartets, quintets, and so on. A fine soloist on the pianoforte will be more at home in a large auditorium like Carnegie Hall or even the Metropolitan Opera House than would a string quartet or any other combination of chamber-music players. Paderewski plays in Carnegie Hall, and, I am sure, would be equally effective in the Opera House. But an organization of chamber-music players would be lost in either place. The Kneisel Quartet plays in New York in Mendelssohn Hall, a small auditorium which is just about correctly proportioned for music of this kind.

Indeed, compared with the opera, the orchestra, and even with the pianoforte, chamber music requires a setting like a jewel. For just as its devotees are the purists among music-lovers, so chamber music itself is something very "precious"—nor do I use this term sarcastically. As I say in my book "How to Appreciate Music," chamber music certainly is a most charming and intimate form of musical entertainment, and the constituency of a well-established string quartet inevitably consists of the musical élite.

The same opinions that have been expressed regarding the sonatas and the symphonies of the great composers apply in a general way to their chamber music. Haydn's is naïve; Mozart's more emotional in expression; Beethoven's, among that of classical composers, the most dramatic. Haydn has a trio for pianoforte, violin, and violoncello, with a rondo in Hungarian style, which is so popular that it still is played not only in its original form but even by theatrical orchestras. Probably no quartet of chamber musicians would consider a season complete without at least one string quartet of "Papa Haydn's" in its repertoire. Mozart, however, marks a great advance over Haydn both in vigor and in depth of expression. Wagner said of Mozart that he composed between the elation of one hour and the anguish of the next. He is indeed the stepping-stone to Beethoven.

Many hold that the last word in string-quartet composition was uttered by this great composer. In fact, Beethoven's last quartets, in which the instruments are employed quite independently and in which rôles practically of equal importance are assigned to each, are regarded by Richard Strauss as having given the cue to Wagner for his polyphonic treatment of the orchestra, and Wagner himself spoke of them as works through which "Music first raised herself to an equal height with the poetry and painting of the greatest periods of the past." Nevertheless, there are many who hold that in his last quartets Beethoven sought to accomplish more than can be expressed with four stringed instruments, and prefer his earlier works of this class, like the three "Rasumovski" quartets, Op. 59, dedicated by the composer to the Russian prince I have mentioned as maintaining a private quartet.

Beethoven may be supreme for power in his chamber music, but Schubert also composed some exquisite music for strings and for pianoforte in combination with strings. Schubert's most famous quartet is the one in D minor with the lovely slow movement, a theme with variations, the theme being from his own song "Death and the Maiden." One of the greatest works in the whole range of chamber music is his string quintet for two violins, viola, and two violoncellos. His pianoforte trios also are noble contributions to this branch of musical art. "One glance at this trio," writes Schumann of the Schubert trio in B flat major, "and all the wretchedness of existence is put to flight and the world seems young again. . . . Many and beautiful as are the things Time brings forth, it will be long ere it produces another Schubert."

Mendelssohn's chamber music is as polished, affable,

and effeminate as many of his other productions, and is rapidly falling into a state of desuetude. Schumann has given us his lovely pianoforte quintet in E flat, besides five quartets. Brahms has contributed much that is noteworthy to chamber music, and, as a rule, it is less complex and more clearly scored than his orchestral music. Dvořák in his E flat major quartet (Op. 51) introduces as the second movement a Dumka or Bohemian elegy, one of the most exquisite of his compositions. Fascinating in his national musical tints, he was genius enough for his music to be universal in its expression; and he who used the folk-songs of his native Bohemia so skillfully was no less artistic in the results he accomplished when, during his residence in New York, he wrote his string quartet in F (Op. 96) on negro themes. Tchaikovsky and neo-Russians like Arensky, and the Frenchmen César Franck, Saint-Saëns, d'Indy, and Debussy, are some of the modern names that figure on chamber-music programmes.

Among unusual combinations of instruments in chamber music are the following: a sextet by d'Indy for trumpet, two flutes, and string quartet; an octet by the Russian composer Liadoff for piccolo, two flutes, three clarinets, harp, and bells; a septet by Saint-Saëns for trumpet, strings, and pianoforte; and a humorous trio by Latann for piccolo, guitar, and trombone. A theme and variations by Kroepsch, for tin whistle and pianoforte, may be classed among the curiosities of music.

IV. COMPOSER, PERFORMER, AND LISTENER

By Horatio W. Parker

Music of To-day—The Composer's Function—The Performer's—The Listener's—Classical Composers and their Present Listeners—Modern Music Analyzed—Opera—Strauss and Debussy—Ideal Views of Music.

A FAMOUS orchestral conductor once told me that he was glad he would be dead in fifty years, so that he would not have to hear the music of that time. It is needless to say that he was conservative, but it should be stated that he was one of the best-known and most efficient conductors we have ever had in this country. Although his remark is typical of the critical attitude of many who have to do with new music, yet it does not in the least represent the attitude of the public, which is interested and pleased as never before with the music of our own time. There have always been people to declare that the particular art in which they were interested, at the particular time in which they lived, was going to the dogs, and there seem to be peculiar excuses for this belief in music-lovers just now. But there ought to be some way of reconciling the pessimism of the critics and the optimism of the public, which expresses itself eloquently in the buying of many tickets. By critics I do not mean merely the journalists. I mean rather essayists and those accustomed to give well-deliberated judgment on matters of permanent importance. The journalists have been so often, so rudely shocked that they not only fear to tread, but fail to rush in, and at a first hearing of new things are fain to give forth an uncertain sound, which, in the light of subsequent developments, may be taken for approval or censure.

The pursuit and enjoyment of music call for the exercise, on the part of its devotees, of three principal functions widely different. These are the functions of the composer, of the performer, and of the listener.

The composer is the source and motive power of all art-music, the producer who draws his inspiration from the recesses of his inner artistic consciousness, whose desire and aim are to realize as well as possible the ideals with which his brain is filled. He seeks to give expression to musical ideas which shall call forth sympathetic feeling in those to whom the utterance is addressed. Although in some cases it is apparently meant for an ideal audience which has no existence, nevertheless, if the utterance be true and skillfully made, it will in no case fail of audience or of effect, even though the time be delayed.

The second function necessary to the practice of music is that of the performer or reproducer. This activity is closely allied to the first, which is, in truth, dependent upon it. It is of high importance, and in ideal instances may be artistic activity of a kind hardly lower than that of the composer, though wholly different in character. This also is at root a manifestation of a desire for utterance, of the craving to awaken sympathetic feeling in others; but it is different in that it seeks and gives expression to ideas which are already in existence. The composer seeks those which do not yet exist. The performer gives utterance to the thought of another; the composer, to his own. But the work of the performer is for most people the only actual embodiment of the results of the first function, and he frequently clarifies and enhances the composer's work in a measure beyond expectation. It calls for self-control as well as for self-abandonment, for sympathy in the highest degree, and a twofold sympathy —with the composer and with the audience—and for personal, magnetic power to such an extent that it is wholly natural that people should frequently, even usually, lose all sight and sense of the composer or pro-

ducer, who is remote from them, and admire the work of the reproducing artist, who is always near.

The third function is of equal importance with the other two, but differs from them more than they do from each other. It is the function of the audience or the listeners. This function is largely misunderstood and usually undervalued. It is the exact opposite of the other two essentials of music-making, in that it calls for receptive activity, if one may so express it, for intelligent, passive sympathy. This sympathy of the audience is the mark at which both composer and performer are aiming. It has no public or open reward, though it well deserves one. Audiences certainly should receive credit for intelligent listening, though it is hard to know just how or when to give it. The quality of sympathy is elusive and difficult to appreciate. To most audiences it seems unimportant whether it be given or withheld; the only matter of consequence is the applause. Genuine appreciation is often hard to identify or recognize. It is quite impossible to know whether a smooth, impassive, self-restrained Anglo-Saxon face hides the warmest appreciation or the densest ignorance or indifference. Such emotions often resemble one another. Nor can one ever tell whether the heightened color and brightened eyes are caused by the long hair and hands of the performer or by beautiful music. A particularly good luncheon or dinner preceding the concert may have the same outward effect. So the successful listener is a mystery, but a pleasing and very necessary one. His work is as important as that of the composer or performer, and his rewards are none the less real because they are not counted out to him in cash, because he pays and does not receive a tangible medium of exchange. They lie in the listening itself and in the consciousness of improvement which is the result of his effort.

In speaking of modern music, we can omit personalities concerning classical composers. Their works fall entirely to the exercises of the second and third functions mentioned; but since the bulk of contemporary music is by classical composers, it may be well to speak briefly of the attitude of performers and audiences toward music of this kind. In an ideal world the performer and the listener would have the same kind and degree of pleasure in music except in so far as it is more blessed to give than to receive. "We are all musicians when we listen well." It may be laid down as a general principle that performers of classical music have more enjoyment than listeners. Palestrina is a preclassical composer with distinct limitations, and it is quite reasonable that he should appeal under ordinary conditions to a small audience, and to that imperfectly. He is a religious composer, and most audiences prefer to keep their religious feelings for Sunday use. He is a composer of Church music to be sung in church, so that his work must miss its effect in a modern concert-room. We have very few churches in our country fit for the performance of Palestrina's music. I know a jail or two where it would sound wonderfully effective, but there are obvious reasons for not going so far in the pursuit of art. It follows, therefore, that Palestrina in a concert-room is enjoyed by the average listener only by means of a lively exercise of the imagination, with frequent, perhaps unconscious, mental reference to what he has read or heard about it.

If there is enthusiasm, it is surely for the performance, because the music itself is so clear, so pure, so absolutely impersonal, that it is hardly reasonable to expect it to appeal to the listener of to-day. He is too remote from it, and should not think less of himself because he does not feel an immediate response. In proper circumstances, in a real church, he would surely respond at once. For this music is the summit of a great wave of musical development. Nothing exists of earlier or later date which may be compared with it. It is ideal Church music, ideal religious music, the greatest and purest ever made; and it can never be surpassed, for we have gone by the point in the history of the art at which such effort as Palestrina's can bring forth such fruit.

The public attitude toward Bach is much more natural and unconstrained. He is nearer to us and is an instrumental composer. Although in somewhat archaic terms, his music is personal expression in a much higher degree than that of the well-nigh impersonal Palestrina. The vigor, the life, and the animation which inform the whole texture of his work are so obvious that we cannot miss them. Again, in his greatest work the feeling of design is so clear, the upbuilding and the resulting massiveness are so faultless, that the devout and habitual lover of music has the reposeful and at the same time exciting conviction that he is hearing the inevitable. Enjoyment is easy even to the unlearned. In those works which are less massive than the greatest, the pleasure we have from Bach is more subtle, more refined, and perhaps less acute, but we always feel that we listen to a master. Bach gives, perhaps, the highest satisfaction in his chamber music. Much of his work is so very intimate that we find the balance of expression and form most easily when we are near enough to hear every note. The Church cantatas in church, the great organ works in a comparatively small place, or the orchestral music in a hall of moderate size, are among the keenest enjoyments for performers and audience. Applause, if it is given, must be for the performers or for their work. The compositions are above approval. To praise them is like speaking well of the Bible.

In the work of his contemporary Handel, whose texture is less purely polyphonic and instrumental, the enjoyment of performer and listener comes nearer to a point of coincidence. The audience can love it more nearly as a performer does. We feel that the vitality in Handel is of a more human kind, that it is nearer our level, less supernal; but it is convincing and satisfying even when most popular, and is not disappointing upon intimate acquaintance, even though it lack the nearly superhuman fluidity and the marvelous texture of Bach.

The music of Beethoven is so well known, so frequently heard, and so clearly understood that we may take it for granted, and go on to music which is modern in every sense, made in our own time, and addressed to our own personal feelings. Our present-day music is twofold in character, a direct result of the labors of Beethoven and his successors in pure music, and of Wagner and the romanticists in music which is not absolute. The symphony or sonata form is now archaic in the same sense that the fugue is archaic, but both with modifications, are still employed.

Beautiful music may be, will be, made in both forms, but that is no longer the general problem.

It is probably true that since the four symphonies of Brahms, no symphonic works carry the conviction of the symphonic poems of Richard Strauss. Although these are cast in a modification of the symphonic form of Beethoven, they always have a psychological basis or an original impulse outside of music. They are intended to characterize in musical speech or language things which can only by vigorous effort be brought into any connection with music itself. The question naturally arises, Has the power of making absolute music entirely disappeared? I am loath to think so, but certainly the practice has dwindled in importance.

We need not be concerned to examine these extra-musical bases. Granting them to be necessary, one is much the same as another. But that is just what many are reluctant to grant. Many are brazen enough to enjoy programme music frequently in spite of, not on account of, the programme; and some people prefer the advertisements, which are usually in larger print. Both save thinking. But the underlying programme is not what most critics object to. The commonest criticisms which we hear of strictly modern music charge it with a lack of economy, amounting to constant extravagance; a lack of reserve, amounting almost to shamelessness; and a degree of complexity entirely incomprehensible to the average listener, and, if we are to believe careful critics, out of all proportion to the results attained. Of course economy is a great and essential virtue in art, but it is not incompatible with large expenditures. It depends on the size of the fund which is drawn upon. Nor is explicit and forceful utterance incompatible with reserve. As for complexity, it may sometimes be beyond the power of any listener to appreciate. Perhaps only the composer and the conductor can see or hear all the subtleties in an orchestral score. But is such complexity a waste? Not necessarily, for good work is never wasted. Although beauties in a viola part or in the second bassoon may not be obvious to the casual listener, however hard he may listen, they are not necessarily futile. They may, perhaps, be noticed only by the composer, the conductor, and the individual performer, but they are there and they constitute a claim on the respect and affection of future musicians. If all the beauties were hidden, they would be useless, but as gratuitous additional graces they call for approbation. But one may not admire complexity for its own sake. It is far easier to achieve than forceful simplicity.

At a recent performance of a modern symphonic work which was very long and called for nearly all possible familiar musical resources, I recall wondering whether or not it is a bad sign that a composer gets respectful hearing for pretentious trivialities and vulgarities uttered at the top of the many times reinforced brazen lungs of an immense orchestra. There were, indeed, a few minutes of exquisite beauty, but after more than an hour of what seemed an arid waste of dust and dullness. Meanwhile, there were long crescendos, with new and cruel percussion instruments working industriously ever louder and faster, but leading up time after time to an absolute musical vacuum. One's hopes were raised to the highest point of expectation; but unhappily they were raised only to be frustrated.

It is such unsatisfying work as this which elicits pessimistic forebodings as to the future of music as an independent art. Serious critics and essayists have made vigorous attempts to oust the music of the future from existence as an independent art and to relegate it to the position of a sort of language which is to be used, when it is quite grown up, to express more or less pictorially human happenings or emotions. And there have not been wanting composers to support this hopeless view. The application of pure reason to such emotional phenomena as our pleasure in music results occasionally in something very like nonsense. The arts have different media of expression, but excepting the art of literature, the medium is no spoken or written language. Indeed, artists are apt to regard with some degree of suspicion one who expresses himself well in any other than his own peculiar medium. Amateur is a dread term often applied to such men, and they are very likely to be amateur artists or amateur writers, perhaps both. It is consoling to think that all the words written and spoken about art have never yet influenced creative artists to any discernible extent. Their inspiration or their stimulus must come from within, and, after the preliminary technical progress over the well-trod paths of their artistic forefathers, which progress no great artist has ever yet evaded or avoided, their further advancement is always by empirical and not by logical processes; not logical except in an artistic sense, for logic in art, although very real, is not reducible to words until after it has already become an accomplished fact through empirical or instinctive practice. The evolution of logic in art cannot be foreseen or foretold.

The opera is just now the largest figure on our musical horizon, and opera, always responsive to the latest fashion, has undergone very important typical changes of late years. "Salome," by Richard Strauss, for instance, is more an extended symphonic poem than opera in the older sense. It is as if scenery, words, and action had been added to the musical resources of such a work as Strauss's "Zarathustra." It is only about twice as long as "Zarathustra." Strauss's "Salome" and Debussy's "Pelléas and Mélisande" are typical modern musical achievements. In spite of the suavity and popularity of Italian operas of our time and of the operatic traditions of the Italians as a nation, they do not appear to have the importance of the German and French works just mentioned. The two men mentioned seem just now the most active forces in our musical life, and it may throw light upon the music of our own time to compare the two operas with each other, not with other classic or modern works of the same nature; for from such they differ too widely for a comparison to be useful. Old-fashioned people seek in opera a union of speech and song, and each of these two composers has renounced the latter definitely. No human voice gives forth any musically interesting phrase in "Pelléas and Mélisande." In "Salome" the voices, when used melodically, which is seldom, are treated like instruments, and it is no exaggeration to say that song is relegated entirely to the orchestra. The voices declaim, the orchestra sings. Each opera is a natural continuation of its composer's previous work.

Each is an independent growth. Neither composer has influenced the other to a discernible extent. Yet it seems impossible to find any other notable musical work of our own day which does not show the influence of one or the other of these two men.

"Salome" is in one act and lasts an hour and a half; "Pelléas and Mélisande" is in five acts and lasts about three hours. The difference in time is largely due to the underlying play which determines the form and length of each opera. It may be granted that each of these two works reflects conscientiously the spirit of the text. The shadowy, wistful people of Maeterlinck's drama are faithfully portrayed in the uncertain, keyless music of Debussy, as are the outrageous people of Wilde's play in the extravagant, vociferous music of Strauss. "Pelléas and Mélisande" as a play is perhaps the extreme of mystic symbolism. When reduced to its simplest terms in everyday speech, it may mean anything, everything, or nothing. The motive of the play "Salome" is frankly an attempt to shock Herod, as tough a sinner as ever was drawn. The object is attained, and it is small wonder that the audience is moved. There seems to be throughout Debussy's work, to speak pathologically, a preponderance of white blood-corpuscles. In our day and generation we want red blood and plenty of it, and we find it in "Salome," a whole cistern spattered with it. At its first performance in New York so much got on the stage that ladies had to be led out and revived.

There is a great difference in the matter of pure noise. Throughout the whole of "Pelléas and Mélisande" one feels that the orchestra has its mouth stuffed with cotton-wool lest it should really make a noise. Most people want a healthy bellow from time to time to show that the orchestra is alive. And in "Salome" we have an orchestra with its lid entirely removed. The hazy, indeterminate, wistful vagueness which is so much admired in Maeterlinck's poem some people resent in the music. That is too much like an Æolian harp, too purely decorative, too truly subordinate. The orchestra never gets up and takes hold of the situation as it often so frankly does in Strauss's "Salome." "Pelléas" is a new sensation, perhaps a new art; but it is a little like looking at the stage through colored glass. Undoubtedly the play is the thing.

The musical vocabulary of the two men differs immensely. Many admirers of the modern French school think Strauss's music vulgar because it really has tunes, and because one can almost always tell what key it is in. In the French music the continual evasion of everything we consider obvious becomes monotonous and after an hour or two furiously unimportant. One longs in vain for a tonal point of departure, for some drawing; but there is only color. In passing it may be said that the play in its form and vocabulary is the exact opposite of the music. Points of departure are not lacking in its construction, and the language is marvelously simple, lucid, and direct.

The matter of tonality remains. The six-tone scale which Debussy loves and uses so much divides the octave into six equal parts. The augmented triad, which he uses with the same frequency, divides the octave into three equal parts. Both devices constitute a definite negation of tonality or the key sense; for we use the recurrence of semitones in any scale which is to be recognizable as having a beginning and an end. It may be that our grandchildren will not want tonality in our sense, and again it may well be that they will prize it more highly than we do. It is hard to imagine what can take its place; certainly there is no substitute for it in music, for the essence of musical form consists chiefly in a departure from and a return to a clearly expressed tonality. A substitute for tonality outside of music would seem a hopeless abandonment of nearly all that makes the music of Beethoven, Bach, and Wagner great to us. Compare Strauss and Debussy in this respect. Each composer has a rich, individual, personal, melodic, and harmonic vocabulary; each offers new and satisfying rhythmic discoveries; each shows us a wealth of new and beautiful color. The differences in melody lie in the greater directness of Strauss's work. His tunes are sometimes garish in their very baldness and simplicity. This is never true of Debussy, to whom a plain tune like the principal dance tune in "Salome" would seem utterly common and hateful. Polyphony is regarded as the highest, the ultimate development of melody. There seems to be vastly more polyphonic and rhythmic vitality in Strauss's work than in Debussy's. "Salome" is as alive as an ant-hill. "Pelléas" is more like an oyster-bed, with no actual lack of life, but not much activity.

Harmony has become an attribute of melody, and our harmonic sense, a recent growth, furnishes the only means we have of definitely localizing formal portions of musical structure. Total absence of form is inconceivable in music, and form implies inevitably some degree of formality. This element is always clearly present in Strauss and always purposely absent in Debussy, who steadfastly avoids the indicative mood and confines himself apparently to the subjunctive. At great climaxes Strauss ordinarily seeks a simple triad, Debussy some more than usually obscure and refined dissonance. The harmonic element in Strauss is, perhaps, less refined, but it is less subtle. In Debussy this element is less direct and perhaps less beautiful, but quite distinctly less obvious or common, even if less varied.

Fully aware of inviting the warmest kind of dissent, I venture to suggest that Strauss may be a positive and Debussy a negative force in music, the one greatest in what he does, the other in what he avoids. After all, we cannot get on without the common things of daily life, and, admitting his occasional lapses into the commonplace or something lower, Strauss is the most consummate master of musical expression the world has ever seen; not the greatest composer, but the one most fully able to realize in sound his mental musical conceptions. In the last analysis it is, of course, what a man has to say, not entirely how he says it, which furnishes the basis for a sound judgment of him. We should not be too much impressed by Strauss's skill in writing for great orchestral masses. In itself that signifies little more than ability to use the wealth of orchestral material now available in Germany. Strauss's appetite for orchestra is a little like the Eastport man's appetite for fish. It is easily satisfied and not too extravagant. Much more convincing is the accuracy with which he finds rhythm, melody, harmony, and color to express just the shade of meaning he wishes to convey.

To repeat, no musician was ever so well equipped to give to the world his musical creations, and yet since he was a very young man Strauss has produced no pure music, nothing without an extramusical foundation; and although many of his friends and admirers hope still that he will, he admits frankly that he does not intend to.

Are we, therefore, to believe that music must be pinned down henceforth to its illustrative function? One prefers to think that our living composers are unconsciously intoxicated by the luxuriance and wealth of new and beautiful musical resources which have only recently been placed at their command. They confuse the means with the end. They have not yet learned to use their wealth. They are *nouveaux riches*. The more perfect performers, the more intelligent listeners, the new riches on every side tempt them to concrete rather than to abstract utterance. I believe that in the future the highest flights of composers will be, as they have been in the past, into those ideal, impersonal, ethereal regions where only imagination impels, informs, and creates. As for illustrative music, it must always have one foot firmly fixed on earth. How, then, can it rise to the heavens? Although not yet with us, the new vision will come in the fullness of time; and when it does, the whole world will know and follow it.

V. MUSICAL EDUCATION IN THE HOME: TEACHER AND PUPIL

By Gustav Kobbé

Unreasonable Cry for "Pieces"—How Great Players Practise—Responsibility of Parents—Choice of Teacher—Professional Fakes—How Liszt Taught—Danger in Finger Gymnastics—Discrimination as to Pupils and Hours of Practice.

ABOVE all things, parents, do not say to your child's music-teacher: "Can't you give Minnie some more pieces, instead of all those scales and finger exercises?" and then add, like a covert threat, "We heard Florence, from next door, play such a lot of pretty things the other day." It is almost the same as telling him that unless he does as you wish, and not as he, who has made musical instruction his life study, thinks best, you will take your child out of his hands and engage Florence's teacher for her. It may demoralize him, unless he is a person of strong individuality, and may greatly retard your daughter's musical progress.

Then, too, how unjust it is! Remember you have not heard "Florence from next door" play C twenty times with her thumb, D twenty times with her forefinger—and so on, up to G. But her parents have, and the chances are that one of them has said to the other: "Dear, Minnie from next door was here to-day, and it is surprising how many pretty things she plays. I wish Florence's teacher would give her more pieces."

There is no royal road to "pieces"—neither for the beginner nor for the accomplished musician. Paderewski, the greatest living pianist, practises his scales and finger exercises every day for an hour or longer. Sometimes he will play over a brief left-hand passage a hundred times or more before he is satisfied with it. But, when he steps out on the platform next day, he is sure of that passage. Here is a genius who still drudges—which may be one reason why no other pianist is able to rival him with the public. Von Bülow used to say that if he left off his exercises for a day he noticed the effect on his playing; if he left them off for two days the public noticed it; and then he added, with characteristically cutting sarcasm, that if he left them off for three days the critics began to notice it. Music is a matter of head, heart, and fingers (or voice), and the musician who neglects the daily exercises soon will fall off in technical facility. Technique may be only a means to an end, but it is the *only* means to that end.

The foregoing instances one of the mistakes parents are apt to make in their attitude toward their child's musical development. The subject of musical instruction has been often discussed, and as often the fact has been overlooked that instead of only two parties, teacher and pupil, three are involved—teacher, pupil, and parents. How much devolves upon the parents! And how few of them realize that as they can be of the greatest assistance in the musical education carried on within the home, so they can be the greatest stumbling-block in its way.

Choice of a teacher is the first responsibility resting upon the parents, and at the outset they may make a mistake which is irremediable because the effect of mediocre instruction at the beginning may never be overcome. To be started aright is of the utmost importance to the pupil's correct development. Too often a teacher is chosen on the score of cheapness alone and under the mistaken idea that "any one is good enough to begin with"; whereas, if there is a time when a pupil needs to be taught more carefully than at any other, it is at the beginning. Mind and fingers are plastic, and erroneous ideas and poor form are how easily acquired, but with what difficulty corrected in after years!

That a teacher's charges are not high is not in itself against him. But it should not be the sole reason he is engaged. Neither should parents who can afford to pay any price jump at a teacher because his charges are high. It is natural, perhaps, that people who have not given sufficient thought to the matter should believe that a fine player must be also a fine teacher, and pay out a large sum to have a son or daughter take a course of instruction, however brief, with some distinguished virtuoso. They forget that the pedagogic faculty is something quite by itself, and that great players usually lack the patience required of successful instructors. Rubinstein, for instance, would have ruined any pupil whose natural talents were not almost equal to his own. He once told Josef Hofmann, who studied with him, to begin a certain Beethoven sonata softly and in slower time, and, at the next lesson, when Hofmann played it as he had been told, Rubinstein cried out impatiently, "Loud and fast!" The explanation is that Rubinstein was a virtuoso of varying moods. Fortunately Hofmann was genius enough to appreciate these, strike an average between them, and thus benefit by the instruction.

The principle underlying all this is that, when it comes to instruction, it is not the price, whether high or low, that counts, but the teacher himself. It is entirely possible for parents to find a teacher whose charges are moderate and yet who is a competent instructor. Liszt, in the days when Von Bülow, Raff, Taussig, and others, who in turn became celebrities, were studying with him, took no fees whatever. His pupils were his disciples, his music-room their temple, Weimar the paradise of budding musical genius. We are not ripe yet for such conditions. But they indicate the relationship which should exist between teacher and taught. We cannot reproduce Weimar

in Squedunk or Bird Center; but there hardly is in the United States a place so small that there are not in it men and women who are doing the right thing in music and proving their capacity to engage their pupils' enthusiasm and hold them loyally to their tasks. The likelihood that such men and women will be overlooked is what makes me warn parents against making cheapness the sole consideration in choosing a music-teacher. Discriminate between the moderate-priced teacher and the cheap one whose instruction also is "cheap." In the gradual commercializing of the arts in this country musical instruction has not yet reached the point where there are "parlors" where music is taught by laughing-gas or some other "painless" method, but sometimes it seems to me that we are precious near it.

Let me throw out a further caution. Never engage as a music-teacher any one who prefixes "professor" to his name, unless you are sure that he has the right to use the title. Ten to one he is a charlatan. Unless the title has been conferred by a college with a well-established musical department, it is of no value; and, as likely as not, it is spurious. Some conservatories and colleges of music in this country have secured special charters from their State legislatures giving them the privilege of creating "professors" and of conferring the degree of doctor of music. But I should be sorry to have a child of mine taught by one of these "professors."

Another fake—there is no better word for it—is the teacher with this or that "method." There are many "methods"—and in some branches of education methods may go—but in music there is only one correct method, and that is to have no method, but to consider each pupil as a separate individuality, according to talent, temperament, and flexibility of wrist, hands, and fingers. This is what Leschetizky, world-renowned as Paderewski's teacher, does. He has no rule or rote. His teaching varies with the individuality of each pupil. Of course his name is one to conjure with. Consequently there are teachers who never have been out of this country, yet who claim to use, by authority, the "Leschetizky method." Needless to say they are humbugs, for there is no such thing. One of the few pupils whom Paderewski himself ever has "taken on," tells me that the virtuoso, like his teacher, eschews method. At a lesson he has two pianos in the room. Seated at one, the pupil begins playing. If a passage does not go to Paderewski's liking, he calls a halt and plays it for the pupil on the second piano. This may occur several times with the same passage.

Liszt, one of the few great pianists who have also been great teachers, scorned "method." Often I have heard William Mason, who was dean of the American musical faculty, and who spent over a year with Liszt at Weimar, tell how that master imparted instruction. The pupil simply played, Liszt and the other pupils sitting about the salon smoking and listening. Usually Liszt would call out suggestions as to changes in time and expression; and occasionally he would grow excited, gently shove the pupil out of the chair and, seating himself, play the piece as he conceived it should be rendered. This was a lesson by suggestion, not method, and Mr. Mason said that from the first time Liszt interrupted him and played a passage for him he began to acquire that elasticity of touch which distinguishes the virtuoso from the piano-pounder. Under these circumstances Liszt's American pupil was quite willing to be shoved off the chair.

Such lessons sound too good to be true, and so they are unless the master is a Liszt. But the incidents noted show that the greatest pianist and greatest piano-teacher who ever lived, Liszt, and the most famous instructor in music to-day, Leschetizky, and his most famous pupil, Paderewski, regard a cut-and-dried method as futile. Most parents are obliged to engage teachers for their children in the locality in which they themselves live. But that is no reason why they should not discriminate, and bearing in mind what I have said, avoid the merely "cheap" instructor, the "professor" and the man with a "method."

Some teachers have a system of finger gymnastics in connection with their lessons. But such attempts at securing greater pliability in the cords and muscles used in playing should be countenanced only with the utmost caution. In fact, it is safer to forbid their employment by any teacher, however able in other respects, who has charge of your children's musical education. It was by gymnastics of this kind that no less a musician than Robert Schumann ruined his brilliant prospects as a pianist. He strained certain essential cords. An apparatus for hand and finger gymnastics was patented under the name of chiro-gymnast in London in 1842. I have seen the illustrated book which describes it, and the pictures remind one of a torture-chamber during the Inquisition. Still earlier in the century musical London had been torn by a dispute between one Logier, who had invented a so-called chiroplast, for securing the proper position of the hand in playing, and a committee of the London Philharmonic, which reported adversely on the inventor's claims. Now it is regarded simply as a curiosity in musical pedagogics. That the only legitimate dexterity is that acquired by practice on the musical instrument itself may be set down as one of the eternal verities of music.

So much for the chief considerations that should be weighed in the choice of a teacher. That choice having been made, however judiciously, there still remains much which parents can do to make or mar the musical progress of their children.

To begin with, there should be discrimination on the part both of parents and teacher between a child who shows promise of achieving celebrity in music and is to be taught accordingly, and one with whom music is to be but an added accomplishment in the circle of home and friends. An abnormally gifted child, thoroughly in earnest, is apt to practise too much, and to be encouraged in it by overambitious parents and teachers until a promising career may be ruined by the strain. Alexander Lambert, who has brought forward many concert players, will not allow even his most advanced pupils to practise more than four hours a day. He says significantly that a pupil who will not become a virtuoso on four hours' daily practice will not become one on six or eight hours'. Even the four hours of practice which he requires he divides into four periods, between which the pupil is obliged to rest or, preferably, take outdoor exercise.

It is true that Paderewski often practises eight hours a day, but he is an artist of many years' standing and, in spite of his slender and poetic appearance at the piano, a man of great muscular strength, developed largely through his favorite method of exercise, swimming.

The great majority of music-pupils are, of course, amateurs, and of these, in turn, the great majority are girls. It hardly seems necessary to point out that their health should be guarded most carefully, and yet the physical development of a child is often overlooked by parents and teachers ambitious to push the pupil unduly. The schedule of instruction and practice always should be arranged with careful consideration for the fact that there are school studies to be attended to and time for outdoor exercise to be provided. In New York many children spend their mornings in school and their afternoons at their music-lessons, dancing-class, gymnasium, or skating in a rink. The dancing, gymnasium, and skating are supposed to be systematized exercise, a term which to me seems to have been coined to ease the conscience of parents who are following the prevailing fashion of unloading the care of their children on others, so that it will not interfere with their own "society" engagements, For nothing indoors ever will take the place of outdoor exercise.

A young beginner under a good teacher will progress satisfactorily with two or three periods each of three-quarters of an hour, and with an hour's practice daily between lesson days. Even that hour should be divided into two well-separated half-hours. There is a tendency nowadays, among people who can afford it, toward brief daily lesson periods and no practice, which amounts to the same thing as having the pupil practise under the supervision of the teacher. On the face of it this seems advantageous, but it is open to the objection that it prevents the pupil acquiring self-reliance. What is said here is of general application. Music-lessons may be begun any time between the ages of five and eight years, but with a child of five I should have even shorter lesson and practice periods than I have indicated—say three instruction periods of half an hour each a week, with from half to three-quarters of an hour practice on those days when no lesson is given.

Parents should not expect of children who are unusually bright at school the same rapid progress in music, which is largely a matter of temperament. A child may be quick in general studies, yet lack ear for pitch or tune and limberness of fingers. Often the musical sense is latent and does not begin to disclose itself until after a fairly long course of instruction. For this reason, even with the brightest child, too much should not be expected of the teacher. On the other hand, progress should be observable. For I maintain that with skill and patience on the part of the teacher every child, even of the most ordinary intelligence, can be taught music and reach the point when his or her performance will be a pleasure to the home circle. In fact, is there any reason why the early steps in music should be harrowing to the soul of the listener? The great point is that whatever the child is taught to play it should be taught to play well. This is something upon which parents cannot insist too strenuously. In it lies the difference between good playing and sloppy playing, possibly all through life. A finger exercise, a scale, properly delivered—that is, clearly and accurately—is not disagreeable to listen to; and the little beginner's pieces, when well taught, may give positive pleasure. To hurry a pupil from one half-learned piece to another, which, in turn, will be only half learned, is a tendency of mediocre teaching. Nothing is more distressing than the playing of a child, or even of an older pupil, who, having learned much, yet has learned nothing.

I have spoken already of a proneness on the part of parents to judge a child's musical progress by the number of pieces it has learned in a given time. I did not mean by this that a pupil should, in the early stages of instruction, be restricted wholly to exercises and scales. Aside from the fact that the parents who pay the piper naturally want to hear the tune, it would be a pedagogic error. Montaigne experienced pleasure in learning Greek as a child because his father persuaded him it was a new game. So pieces awaken a child's first pleasure in musical instruction. Each set of exercises should lead up to a well-written little composition, thus illustrating to the pupil the relation between technique and the art to which it is a means—and, as I said before, the *only* means.

The great majority of music-pupils take piano-lessons, and I have written with this in mind. What I have said can, however, be applied to any instrumental instruction. The voice would require an article by itself. But in general boys should not have regular vocal instruction until the voice has definitely changed; girls not until it is definitely established, usually about the age of seventeen or eighteen.

Nothing has a more refining influence on the home circle than music. It is the most ethereal of arts and diffuses an atmosphere all its own. Parents, even if not musical, who have their children properly taught, can have but little idea, at the outset, of the paradise they are opening up, not only to the children, but to themselves as well. For they, too, will progress with the younger generation, until, so far as concerns taste and appreciation, the beauties of this divine art will lie before them like an open book.

VI. AMERICAN MUSICAL TASTE

By John Philip Sousa

Cosmopolitan Requirements—Growing Popularity of Good Music—What Makes the High-class Composition Popular—Wagner's Wonderful Hold on the Public—Power of Descriptive Music—Military Marches—A Forecast.

THE American demand for music is the most cosmopolitan demand in the world. It represents the composite tastes of more different people than were ever brought together under one flag, and in one country, since the famous tower of Babel took its ominous tumble. The American people hate a rut, and no one knows better than I do that in order to please them they must have an infinite variety. They must have all kinds of music by all kinds of composers. Like our appetite for food, our appetite for music has been cultivated by tasting a little of the products of all nations. We have come to eat and enjoy Irish potatoes, English roast beef, French mushrooms, Italian macaroni, Spanish saffron and Spanish onions, German sausages and cheese, Russian caviar, Chinese ginger and rice, to say nothing of a hundred and one other dishes coming from all parts of the globe. We recognize the genius of the French composer long before Germany takes him up, and Wagner was well known and widely played in the United States before the French came to realize his true greatness. Mme. Liza Lehmann came to America with her dreamy "In a Persian Garden" under her arm. London couldn't hear the beauty of the thing, but New York did, and Mme. Lehmann's reputation as a composer was established.

I am not a believer in national schools of music. The very idea seems ridiculous in itself. National music is nothing more nor less than international imitation. A striking genius like Wagner arises, and he starts in to compose just as all his contemporaries composed. He writes a work like "Rienzi," which is nothing more nor less than an advanced form of Italian opera of the day. Then he does a little original thinking and realizes that if he wishes to make a bid for real greatness he must work not as an imitator but as a creator. The consequence is that he brings forth a number of genuinely inspired works, and, lo and behold, we are told that a new German school has been founded. It would have been precisely the same if Wagner had been born in Russia or in Tasmania. In no other art is individualism so strong as in music. In Wagner there is really no suggestion of a national school. It is simply Wagner, a musical mountain peak, and that is all. If Wagner had written music suitable only for Germans it would not be as popular in New York, Sydney, Bombay, London or Paris as it is in Bayreuth. Wagner wrote good music, great music, and the world identifies it, irrespective of any school.

Public taste in America is unquestionably improving. All changes of this kind must be gradual. Musical taste is all a matter of becoming accustomed to certain kinds of music. I remember that when I commenced horseback riding in my childhood I noticed that horses were liable to shy at bits of paper flying about the road. Later they were frightened by the bicycles, trolley-cars, and automobiles. Now there are more of these vehicles in the road than ever, but horses are accustomed to them. The horses will doubtless have a new lesson to learn if the flying-machine industry continues to grow as it has started. It is much the same with the public. The people who were ridiculing Wagner forty years ago are now clamoring for his music. The brain of the public grows and becomes more responsive to new impressions every day.

The public lets one know very quickly whether it is interested or not. How do you suppose I tell? If I hear a few people cough during the performance of a new number I rarely ever play that number again. Coughing in an audience is a sign of restlessness and impatience. When they are interested they are quiet, and it is really very astonishing how one can veritably feel the interest of an audience. It is something in the atmosphere and the sensitive artist knows and feels it at once.

The commercial side of America has unquestionably interfered with the development of music in the past, though it has, in another sense, been the means of developing it. People who have interviewed me seemed to be most interested in how much money I have made out of it. It happens that a great number of my compositions have been what can only be described as "hits." They have brought me large returns, but I am willing to make the statement that no composer has ever made less attempt to make money than I have. While writing I never think of the possible financial reward. My sole object is to turn out a good piece of music, a worthy piece, a piece that I can be proud of, no matter whether it is a military march or a more elaborate suite. I have one composition which I think far and away above anything I have ever written. It is called "The Last Days of Pompeii"; I have played it for years in public, but I have always avoided publishing it, as I desire to keep it and work at it until I am sure that it cannot be improved by further work.

One reason why the love for music in America has been somewhat more difficult to develop than the love for music in Europe is attributable to the vast number of other amusements which the American people possess and enjoy. In Europe the principal sources of amusement are to be found in the gatherings at local inns or taverns, the occasional picnics or excursions to the country, and visits to the theater, the opera house, and the concert hall. Americans have a host of other amusements which take their time and attention. Baseball, for instance, is one of the leading interests of

thousands of men in our large cities. The automobile, combined with American wealth and prodigality, is another amusement which draws thousands away from the serious pursuit of studies forming the basis of culture. The Sunday newspapers, piling ton upon ton of printed matter upon the tons and tons of magazines, booklets, advertisements, etc., all of which have to be read by an eager public, also take up an enormous amount of time. What the Americans have accomplished in music is truly amazing in face of the countless distractions they meet every day of their lives. There is a big difference between the German, calmly sitting in his Bierhalle sipping his malt and hops and listening to a Beethoven symphony, and the strenuous and commercial American who hears his "Tristan und Isolde" with half his mind set upon the problem of how he is going to squeeze a sea bath, a roller-coaster ride, a moving-picture show, and a course dinner into the next hour.

But we are commencing to stand alone, and when I say "we," I mean the whole American people, and not a few blue-nosed "highbrows" who, after a residence of many years in European countries, have come back to us with a kind of snobbish all-knowing superiority which is, to say the least, aggravating. Until very recently, music has only been part of a function for the American people. They were willing to accept it as one of the many events in a day's outing. Now good concerts of standard works are becoming commercially profitable. People find such delight in hearing good music that they are willing to pay well for it. That is what we can call real musical culture. Moreover, the day of big reputations is passing in a most encouraging manner. The American people are waking up, and they refuse to be deceived. It is impossible for a singer with a reputation gained during the Civil War and a voice that strikes terror to the heart of the most courageous to tour America and hoodwink the people. I do not believe that any musical performer or organization of performers can succeed unless they can exhibit ability which entitles them to public appreciation.

High-class compositions become popular because the real composer is always inspired. I should say that about ninety per cent. of all the musical compositions written are uninspired. What is inspiration? Ah, one could write volumes and volumes in the telling of that and still be just as far away from a definition as at the beginning. No one doubts its existence who has had the kind of musical experience that I have had with the public. The public seems to recognize musical inspiration at once, whether it comes to them through the music of Wagner, Schubert, or Brahms, or through the music of Stephen Foster, or the trite but clever tunes of some unschooled writer of ballads of the day.

The success of a piece is due to the composer, the power beyond the composer (inspiration), and to the public. The higher power which has incited the composer's mind and empowered him to write a musical masterpiece seems to be at work preparing the public to receive that masterpiece as it should be received.

The mere acquisition of the technical knowledge will never make a composer any more than a knowledge of grammar will make an author. What is a string of words without ideas, and what is a string of notes without the spark which distinguishes them from dead, dull, uninteresting ink and paper? Potboilers are rarely ever successful. The man who sits down and says "I need the money, therefore I will write a kind of composition which I know the public will like, and make money with it," is almost invariably a failure. The composer must believe in his work and have faith in himself, whether he be writing a three-act grand opera or a popular valse. Above all things, he must forget the idea of gain. Gain and music don't go together. I remember the case of a composer of considerable renown who brought one of his lighter compositions to me and asked me to put it upon my programme. As a favor to him I consented, although I did not like the piece. Then he said, "Of course, I don't want my own name to be connected with this, you know. You must play it under an assumed name." Then I told him that if he was ashamed of it I was even more so, and we had better not play it at all.

One of the most notable instances of the popularity of good music is seen in the case of Wagner's works. Wagner, the composer who was first heralded as the writer of marvelously complex and intricate works which could only be understood by the advanced musician, is now demanded by popular audiences. I rarely play a programme without a Wagner number, and my band has in its repertoire practically everything which Wagner has written. This means that the public demands not only the beautiful melodies like the "Evening Star," "Preislied," "Bridal March from Lohengrin," "The Spinning Song," etc., but also is delighted to hear the complicated music of the "Kaisermarsch," "Tristan und Isolde," and "Parsifal." The reason for this is that Wagner was one of the most inspired of all composers and was the greatest composer of dramatic music. In fact, if I were to send a missionary orchestra to a people who knew nothing of music for the purpose of making converts, I should have the orchestra commence upon them with Wagner's "Ride of the Valkyrs."

The people are fond of dramatic music because they are fond of the pictorial in music. They have read the plots of the operas and like to associate the stories with the music. They love color, movement, and lights. We are all very primitive in this respect. Of course, when it comes right down to the truth of the matter, descriptive music must depend very largely upon literal conceptions which the hearers have previously formed. There is mighty little difference between the musical representation of a storm and of a boiler explosion, but if I tell you it is a storm and not a boiler explosion you immediately picture a storm, hear the thunder, and see the lightning flash. This is one of the reasons why operatic and descriptive music is so popular.

Some composers carry descriptive music to an absurd extreme. You can't depict a man taking off his shoes, and the representation of a domestic quarrel is often more ridiculous than descriptive. It must be admitted, however, that there is an appropriateness which must govern all descriptive music. Although, as I have said, I do not believe in national schools, but rather in individualism in musical composition,

it is, nevertheless, a fact that the music of certain peoples has racial characteristics. The Scotch, for instance, are influenced in their music by their national instrument, the bagpipes. Mendelssohn knew this, and in his "Scotch" symphony he shows the study of the characteristics of the bagpipes throughout the entire piece. Only once does he make a slip and omit this characteristic. Donizetti, however, in his Scotch opera "Lucia di Lammermoor" has hardly a suggestion of anything that might be called Scotch in the entire work. The audience must rely upon the plaids and kilts for local color, but in the Mendelssohn work an audience in a concert hall which is at all familiar with Scotch music would detect the unmistakable atmosphere at once.

I have often been asked to account for the success of my own military marches. Of course it is impossible for ony one to tell what makes a piece of this kind popular, but I have always felt that a march must have an element of the barbaric in it to make it go. It must be robust, it must stir the blood, it must be filled with Oriental splendor, suggesting the flash of the bayonet, it must make you think of battalions of big-chested men in motion. Europe remembers our marches while America almost forgets them. Some of my first marches are just as popular in Europe to-day as when they were first written. In writing a march I always try to make it sound so that any one in the audience would say after hearing it, "That is the way I would have wanted it to sound if I had written it." No matter how refined and cultured we may be, we all have an element of the savage, the man of the wilds and the steppes in us. We like the clashing of cymbals, the roar of the drums, the intoxicating rhythms, and the blare of the brass that carries us off our feet whether we will or not. All this I try to put into my marches. Sometimes I wait for months before I get the right melodic inspiration. Then the musical idea comes and I can't wait until I have it worked out.

Once a young lady asked me: "Why is it that I like military marches better than any other kind of music?" I told her that it was because of the barbarian, the savage, the Oriental in her. She seemed shocked at this and said: "How can you detect anything of the savage in me?" I called her attention to the feathers in her hat, the skins of wild animals with which she trimmed her dress, and the little ornamental tassels on her slippers. She was quite willing to admit that we are not so very far from the forest and the desert after all.

There will always be cheap and trite music because there will always be a certain class of people who will have to evolve from no music whatever to music that is worth while through music which requires very little taste or intelligence to understand. The problem is to get them interested in good music by first gaining their attention through music of less esthetic value. I have no sympathy with those who would build a Chinese wall around the good music and keep all those out who honestly confess that they don't understand it. Because a man cannot understand Strauss or Debussy is no reason why he should be musically excommunicated. The people themselves readily determine what they like and what they dislike. There has been a great deal printed about Strauss and about Debussy, consequently there has been a kind of a fad for their music, but I notice that the compositions of Puccini among the later composers elicit more real applause than those of any other writer, and I am quite willing to predict that twenty years from now they will be equally popular. Musical fashions cannot be determined by printer's ink. The public in the end will demand the kind of music it likes best, and not what critics and writers say ought to be most popular.

VII. HOW TO CONDUCT PUPILS' MUSICALES

By James Francis Cooke

Purpose of the Musicale—Monthly *vs.* Annual Musicale—Things to Avoid in the Pupils' Musicale—Valuable Points to Introduce—Are Pupils' Recitals Expensive?

IN the giving of pupils' musicales a little practical experience is worth more than a vast amount of theory and conjecture. One is reminded of the story of the Irish soldier who, several years subsequent to the battle of Waterloo, was asked what kind of a battle it was and replied: "Sure, there's no way of describin' it. Ye must go an' take a look at it yersilf, for be the way they was goin' it when I got hit, they must be fightin' yet."

So many opportunities are open for mistakes that it is little wonder why some teachers declare themselves against the pupils' musicale, but those who have given enough of them to know how they should be given declare that there is nothing in the whole scheme of musical education to take their place as a means of stimulating the work of the pupil. Generally speaking, pupils' musicales are given for five purposes.

First. To give the pupil confidence. The pupil who never has an opportunity to play in public rarely, even as a pupil, plays with sureness and finish. The very idea that he is being watched by some one seems to upset him. No matter how long or how carefully he has practised, the dreaded thing called stage-fright seizes him and demolishes his best efforts. This self-consciousness can only be overcome by repeated appearances before an audience. I once had a pupil who, at the beginning of the season, broke down miserably in Mendelssohn's "Spring Song" before an audience of only a very few people. She was so upset over the matter that she ran to another room and cried for at least an hour, imagining that a career as an artist was beyond her reach. I insisted upon her playing at six or seven recitals during the year, and at the end of the season she played complicated pieces, such as Liszt's "Waldesrauschen," with ease and great confidence. This is only one instance from dozens that have cropped up in my own experience, and I attribute the improvement solely to frequent student musicales.

Second. The pupils' musicale is of immense value in extending the musical view of all the pupils in your class. Not only those who play are benefited, but those who do not, and who may be so situated as to have no other opportunity to hear any good music other than the pieces they are themselves studying, are enabled to become acquainted with a wide range of different kinds and grades of music. A musicale inspires younger and less advanced pupils to want to attempt more difficult music, and is often the means of inducing a pupil to continue his musical work who might otherwise abandon it.

Third. The pupils' musicale affords the parents of the pupil an opportunity to get an idea of what the pupil can really do. In many cases the parents are ignorant of the real advancement of their child. They hear the little one practising, and often have a desire to get as far away from the practice as possible. The father is often quite unable to determine the progress of his son or daughter. He is unfamiliar with your aims, and feels that, when he has paid your bill, his duty to his child is done. If you can induce him to come to your studio to hear his child play in competition with other children you will find that his interest in the child's training will almost double. Music means something more to him then than a quarterly reminder that it takes just so much from his bank account. More than this, in many cases, it makes him familiar with a better class of music. He hears, let us say, the Chopin "Nocturne in E flat (Celébre)," the "March from Athalie," of Mendelssohn's, or Liszt's "Love's Dream" (Nocturne No. 3) and similar pieces, and is at first amazed to find that music that is not "rag-time" or "vaudevillainous" is "really very pretty." Many a man has been turned from a piano-organ taste to a connoisseur by means of the pupils' recital, supplemented by good music in his home.

Fourth. The pupils' musicale is unexcelled from the advertising standpoint. There is nothing like it, and I would place it far above all other kinds of advertising, profitable as I have found printers' ink to be. In this land of utilitarianism and pragmatism there is no demand so strong or so frequently heard as the meaningful expression, "Can he deliver the goods?" No matter what you say in print, you will find that what you can show at your pupils' recitals is a far more eloquent appeal to the average American audience. The American father, with his hand upon his check-book, doesn't care whether you have studied with Liszt, Leschetizky, Paderewski, Philipp, or Scharwenka. He wants to know whether you can really teach pupils to play. If you can, and have the advantage of referring to some widely known teacher, all the better. The proof of the teaching is in the playing, and if your pupils play creditably at your recitals you can be sure that more and more pupils will come to you in the future.

Fifth. It is a well-known fact that some pupils will work far harder to perfect a piece for a pupils' recital than they will if they have no certain object in view. In this way, if musicales are given frequently enough, the whole class will benefit. A much greater interest is taken in musical progress, and the incentive of the individual pupil is greatly increased.

It has been my experience that the pretentious annual musicale, usually given at the end of June, has some advertising value, but its educational value is slight unless it is preceded by a series of monthly or bimonthly musicales. One of the great principles of advertising is to present the article advertised at the time when the demand for the article is greatest. An advertisement for some staple drug put in the hand of the consumer just as he is entering the drug store might influence him to purchase that drug and neglect some other brand. Thus, the advertising value of the musicale given in June has depreciated by the time the teaching season opens in July. For this reason one of the big New York schools has established the custom of opening the season with a big concert given at one of the largest halls for the obvious purpose of attracting pupils by the presentation of their best, or so-called "star" pupils. We can, therefore, see that the annual recital is really not as good from the advertising standpoint as the monthly recital. Advertisers also know that an advertisement that appears frequently and regularly makes a much deeper impression than one given only once, and at long intervals.

Turning from the commercial side to the educational and artistic side, any one who has had experience with pupils' musicales knows that the monthly musicale stimulates regular musical interest, while that of the annual musicale is at best only sporadic. More than this, the public is convinced that at the annual musicale the pupils play only pieces upon which they have been working for months and months, and that the annual musicale does not represent the real, "healthy" musical progress of the pupils. In the writer's opinion it is an injustice to both the parent and the pupil to oblige a pupil to work for ten months upon a piece far beyond his ability only to advertise the teacher's business. The regular pupils' musicale has all the advantages mentioned and none of the disadvantages described. I am emphatically in favor of a series of musicales given in the teacher's home, with a small audience. These musicales act as a bridge to the concert hall. It is a terrible shock to a young pupil's nervous system to oblige him to play for the

first time in public in a hall. The large audience, the footlights, the flowers, and the fact that one is on an elevated stage in full view of the audience is enough to destroy the best efforts of the most ambitious beginner. The teacher will find that a series of short monthly musicales are far more economical, more effective educationally, and often better from the advertising standpoint.

Of all things to avoid at the pupils' musicale "dry music" should be placed at the top of the list. The music you select must be interesting. If you happen to be in a district where many of the people have their souls in their pocketbooks and their intellects in their stomachs you must not be surprised if they seem listless and uninterested while your pupils are playing Bach's "Inventions," or Kullak's sonatinas. You invite people to your studio to hear your pupils, but you do not invite them there to punish them, and you must remember that, no matter what your private opinions on the subject may be, music that requires a musical training to appreciate is a deadly bore to many tired fathers and mothers. They will show you what they think of your judgment by attending or failing to attend your next musicale. There is no reason why you should not select interesting music that is at the same time educational. The catalogues of leading music houses are full of such pieces, and if you use a little good judgment, and, beforehand, try a few pieces on some "unmusical" person, as Molière used to read his plays to his cook, you will be rewarded.

Another thing to avoid is the selection of pieces beyond the grasp of the player. This is a fatal mistake. The player is humiliated, and his progress retarded if he breaks down, and your audience will remember one failure, whereas it might forget a hundred beautiful interpretations. See that the pupil is technically able to play the piece, and that he comprehends it thoroughly, before you run the risk of having him play in public.

Your programme must above all things possess variety. If one piece is characterized by flowing arpeggios, such as Lack's "Song of the Brook," let the next one be marked by chords, such as Gounod's "Marche Romaine," or by staccato passages, as in Delibes's "Pizzicati," or by legato, as in Schumann's "Träumerei." I use these popular pieces merely as illustrations of the types. Remember that your audience is likely to know nothing of music, and that the composer's name means little. They judge by the sounds, and if they enjoy them they approve of your recital. If they do not enjoy them they go away with a bad impression. These sounds and combinations of sounds must be carefully contrasted for their benefit, precisely as a merchant would contrast different colors of cloth he might be trying to sell.

For this reason it is rarely wise to give a programme entirely made up of the works of one composer unless you are sure that you will have a cultured audience or desire to give a little studio talk upon that composer's life.

Another mistake the teacher may easily make is that of giving too much attention or too conspicuous a place to one pupil on the programme. Some pupils object to being placed last upon the programme, whereas this is really the position of honor. The great virtuoso reserves his most brilliant and effective piece for the last. One of my own pupils was so offended because of being given this position that she came very near leaving me for another teacher. Here the teacher's natural diplomacy must be employed.

Again, the teacher must be very careful not to give the same piece to different players. Not only are comparisons in playing odious, but pupils remember and judge their advancement in this way. If Alice Wood plays the "Scarf Dance" at a recital in June, and Jessica Jones is asked to play it in November, Jessica, who imagined that she was in a higher grade than Alice, is displeased.

It is also somewhat unfair to ask pupils to play the same piece at one and the same recital, as some teachers do when they have prize competitions. This is a custom in some English institutions, but in America it leads to jealousy, misunderstanding, and often the loss of a desirable pupil. The teacher must also be sure to give the pupil pieces that indicate technical advance. The parent knows little of artistic advance, fingering, touch, and interpretation, but he does comprehend velocity and any technical show. This is one of the many compromises which the teacher is often obliged to make. You can develop the artistic side of your pupil's playing, but the parent must see what he considers progress—not what you consider progress.

I have often heard inexperienced teachers make business announcements at pupils' recitals—even go so far as to advertise themselves in very egotistic terms. That this is bad taste and bad business, it is hardly necessary to say. Let your pupils speak for themselves. If they do not proclaim the excellence of your instruction, or your fitness to teach them, nothing you can say will add to your pedagogical stature.

I have found the plan of giving explanatory notes a very valuable one. Unless you are giving a formal recital you may adopt the following plan. If there is a story connected with a piece, tell it to your audience, and, if not, some little anecdote about the composer is always appreciated by an audience. No matter what your opinion on pure music may be, you may rest assured that your audience will take a much greater interest in the piece if they can connect some story or legend with it. I have found Edward Baxter Perry's "Descriptive Analyses of Pianoforte Works" very valuable in this connection. It is a book which all teachers should possess, as it tells the stories connected with many famous pieces. In giving your explanatory notes avoid references to your pupils or to their playing. These references may lead to much unpleasant jealousy.

The plan of having a visiting artist is also an excellent one. If you have a friend who can play the violin, sing, or read really well, ask him to assist you. He will often be glad to contribute his services from the standpoint of professional brotherhood, whereas he might not be willing to play gratis for charity. Sometimes it is a good idea to get some prominent man or well-known speaker of your acquaintance to make a short address at your musicale.

It is always wise to have a short programme. I have seen programmes with twenty or twenty-five pieces on them. What an ordeal for both the audience and the pupils! I would want a large fee to hear a great pianist play so long a programme. One naturally becomes surfeited with music in a very short time. Long, dull programmes are more injurious to the teacher than no programme at all. They give audiences the impression that "classical" music is a stupid bore.

The writer has found it a very profitable plan to serve light refreshments after the musicales given in his home. Some refreshing non-alcoholic fruit-punch accompanied by dainty cakes and served by some charming young lady pupils from your class will promote a desirable sociability. Your guests have an opportunity to talk over the playing of the pupils, and they go home with a much better impression than they would after a formal recital, where the audience is dismissed and winds out as at a church service.

The expense attached to the home recital is so slight that it need hardly be considered when the immense educational advantages are remembered. The principal expense is that of programmes. It does not pay to have a cheap programme, as it always gives a bad impression. At first I had my programmes printed. This I found entirely too expensive, as I was giving as many as three and four musicales a month at certain times of the year. Then I had a blank form printed with an announcement on the outside. This was also expensive, and I found that I could get blank forms already in print from my music dealers at a much cheaper rate than I could buy them from my printer. These forms had on the outside: "Recital by Pupils of ————————— on ————————, at ————————," the blank spaces to be filled in either in writing or by the typewriting duplicating process known as mimeograph. These blank forms were very artistic and reduced the cost of the printing bill at least one-half.

The next expense was camp-chairs, but by assuring the local caterer that I would use a number during the season he made me a price of twenty-five cents per dozen instead of fifty cents. The cost of the refreshments rarely amounted to over two dollars, and was sometimes under one. I have always felt that these recitals paid me at least one hundred per cent. on my investment of time and money, both from the advertising and the educational standpoint.

VIII. EXPRESSION IN MUSIC

By Louis C. Elson

Expression as the Greeks Understood It—Effect of Counterpoint and Harmony—Making Musical Pictures—Rubinstein's Different Interpretations—Tempo Rubato—Sarcasm of Liszt—Chopin—Oversentimentality and Sense.

IN ancient days expression in music was almost always synonymous with loudness. "Play skillfully with a loud noise" was a Scriptural injunction, which was almost always carefully observed. And this ancient music of the Psalmist was always accompanied with a great degree of gesture and pantomime, which was at that time called "dancing." In this style of expression were given the Song of Miriam and Moses, the Song of Deborah and Barak, the Psalms of David, the Lamentations of Jeremiah, and the Prophecies of Isaiah.

In ancient Athens there were vocal teachers who taught both singing and elocution, and the famous old orations were probably chanted and came within the domain of vocal music. The phonasci, or voice teachers, made much of one kind of song, which was called *orthian* and was sung almost entirely in the highest register of the voice. Plutarch warned his pupils against the danger of bringing on hernia or convulsions by using this kind of song too much or too strenuously.

The giving of definite pictures in instrumental music was not unknown to the ancients, for it is related of Dorion, the Athenian wit, that once, after hearing a picture of a tempest, given upon the harp, he said that he had often heard a greater tempest in a pot of boiling water—the origin of "a tempest in a teapot."

When, however, we read the tributes paid to Music by the old Greek and Latin writers, we cannot but imagine that there must have been beauty in their songs as well as loudness. There are some considerations (too lengthy to rehearse in a brief article) which lead the present writer to suppose that some of the

Samuel Coleridge-Taylor
Richard Strauss
Max Reger
Sir Edward Elgar
Jean Sibelius

Christian Sinding
Eduard Schütt
Cécile Chaminade
Théodore Lack
Benjamin Godard
Ludwig Schytte

ancient music resembled the Scottish folk-songs of the older type.

All these ancient musical compositions were probably unison works, presenting the tune only. Monophony was the music of the world for countless ages. Indeed, there are indications that more than 200,000 years ago paleolithic man enjoyed a primitive monophony. In the Middle Ages, however, polyphony, the adding of melody to melody, began. Whether the expression was much improved by this may be doubted. The yoking of two melodies together, whether they sounded well thus or not, was scarcely a great step in advance.

It is of course unnecessary to speak here of the empty fifths in constant succession, or the fourths similarly treated, with which the science of composition began, not long before the year 1000, but it may be stated that the outcome in the old contrapuntal school was often to have the tenor sing a well-known folk-melody in very long and sustained notes, and as loud as he could, while the other voices wreathed counterpoint around it.

To finish our catalogue of the three styles in which all mortal music may be classed, let us at once state that the monophonic (unison) music, and the polyphonic (plural-voiced) music, was finally followed by the homophonic (united-voice) music which is the chief expression of our art to-day. This is *harmony*, and few have any idea of how young this branch of our music is.

Were there not chords in the old contrapuntal music? Certainly, but these chords were arrived at in a different way from that attained by the study of harmony. The chords ensued by different melodies progressing together. The music, in other words, was horizontal, like the strands of a rope, while now it is chiefly vertical, like the pillars of a bridge, the chords supporting a single prominent melody. As a consequence, in the old Latin treatises on counterpoint, there was a chapter or two tacked on at the end, which treated of chords which sometimes ensued by the combination of different melodies.

It was only in 1722 that Rameau endeavored to treat chords as entities, and his treatise was so mistaken in its theories that it had no influence on harmony. In 1791 a Frenchman named Catel brought forth the very first essay on chords that had any practical teaching value. More than a decade after 1800 came the first real harmony instruction book—that of Godfrey Weber.

Counterpoint had the minimum of expression; harmony has frequently the maximum. As a consequence there was little of that emotional power which we desire in modern music in the older contrapuntists. Josquin de Près had a glimmering of the modern idea when he, a little before 1500, introduced dissonances as a means of portraying emotion. Without changes of tempo and subtleties of shading it would be impossible to teach musical expression, and in 1450 De Muris wrote, "In Music there are three tempi"—quick, slow, and medium—while the marks of expression and tempo, which are the life-blood of expressive composition, only began with the Italian operas, after 1600.

Once the seed of expression in music was planted it grew very fast. Tentative efforts at picturing definite things in instrumental music (above spoken of as existing long before in Greece) began to reappear. Couperin and Rameau commenced to make the spinet especially prominent in this direction. We must remember that this instrument could not shade, but gave a constant staccato, mezzo forte. As a consequence one element of instrumental expression, proper phrasing and fingering, was entirely lacking. Prätorius, in 1619, said, "Let the pupil strike the key with any finger he wants to, yes, even with his nose, so long as he gets the right tone at the right time." The present writer has in his possession more than one "Harpsichord Method" in which the scale is fingered—2.3.2.3.2.3.2.3 in the so-called "American" (really English) fingering.

One fault this music-picture-painting always has. It cannot be as definite as painting, or sculpture, or literature. I have frequently tried this experiment before large audiences: Playing a certain piece by Rameau, I have told the public that it quaintly pictured something. At the end of the work the public remained mystified. Then I have given the title, "La Poule" (The Hen), and played it over again. At once ripples of laughter would greet the cacklings of the music. In painting it would scarcely be necessary to inform the spectator that the picture was that of a hen, before it could be appreciated.

But picture-painting has become one of the chief points of expression in modern music. Beethoven launched it in his "Pastoral" symphony; Mendelssohn advanced it in his concert-overtures. One of the latter may illustrate very clearly the weakness of programme music, as this pictorial music is called. Mendelssohn wrote a beautiful overture on Goethe's "Meeresstille und glückliche Fahrt." This pictures being becalmed at sea ("as idle as a painted ship upon a painted ocean") as an introduction, and then a prosperous voyage. It is glibly translated, or mistranslated—"Calm Sea and Happy Voyage." As a consequence a few thousand auditors have mistaken Mendelssohn's tonal picture of marine desolation for a very calm and smiling sea. A gentleman of considerable culture once sent me the opening notes of this as a parting wish before one of my European tours, but I do not think that he intended to wish me to suffer in a dead calm.

Surely, therefore, Rufus Choate was not far wrong when, on attending a certain concert, he said to his daughter, before the music began—"Now explain these numbers to me, *that I may not dilate with the wrong emotion!*" There have been many prominent instances of critics and of auditors, in modern music, dilating with the wrong emotion.

With the advent of modern music the signs of expression in music increased enormously. Yet these by themselves, no matter how numerous they are, do not constitute the actual expression of a work. Beethoven, who turned the tide from the spinet and harpsichord to the piano, used many signs of expression, yet he understood that these were little more than index-marks of the true feeling. Franz Kullak said that even with an exact observance of all expression-marks a soulful interpretation is not arrived at. As long as nothing more is done, the interpreta-

tion will usually prove stiff and void of expression. Ferdinand Ries, Beethoven's pupil, calls attention to the great master's frequent deviation from fixed expression-marks.

My own experience with great artists of modern times has been very similar. I have heard Rubinstein, for example, play Beethoven's "Moonlight" sonata four or five times, yet no two of the interpretations were alike. Sometimes the moon was full and sometimes a crescent. Rubinstein was the embodiment of what may be called true expression in piano-playing. It was a great man interpreting the poetry of other great men. Naturally there was an amount of individualization in such work. The artist played as he felt at the time—and a great artist has the right to moods. Hubert Herkomer once said to me regarding Bülow's exactness of interpretation—"When a man can always achieve exactly the same result, he ceases to be an artist and becomes a manufacturer!"

Rubinstein certainly never was such a manufacturer. Once, after he had been in a rather unpropitious mood, at one of his recitals, a lady ventured to sing the praises of the recital to him, in the green-room. "Great recital!" he exclaimed, "why, I could give another recital with the notes I left out!"

Chopin used to give a comical illustration of the comparative uselessness of marks of expression without a soul behind them. When he was not in a mood for playing, and his friends, particularly Mme. Dudevant (George Sand), forced him to the piano, he would play one of his nocturnes or études with absolute exactness, but with the soul left out. I have heard De Pachmann do just the same thing, but unfortunately the mass of the audience, particularly the "encore fiends," did not understand the subtle difference, and believed that they were receiving an important and beautiful addition to their programme—without expense.

This brings us to one of the most subtle points of much modern music—the tempo rubato. If the accounts of many auditors may be believed, Beethoven himself used this in his piano performances. Yet the latter-day pianists associate it chiefly with Chopin and avoid it with Beethoven, an error, we believe.

What is tempo rubato? Not "stolen time," Paderewski believes, for often there is an increase, instead of a subtraction, by means of a ritardando. Liszt once impressed the idea of a rubato upon a pupil at one of his Sunday meetings at Weimar, as follows: A young pianist had played a Chopin ballade that fairly staggered like a drunken man, with its rubato. Liszt took him to the window and pointed to the trees. "Look at them," he said; "the twigs and leaves are dancing freely in the wind. The larger boughs move very little, the trunks not at all. Let that be your rubato!" Liszt loved to use such parables, and allow his pupils to unriddle them, as we may allow our readers to unriddle this one.

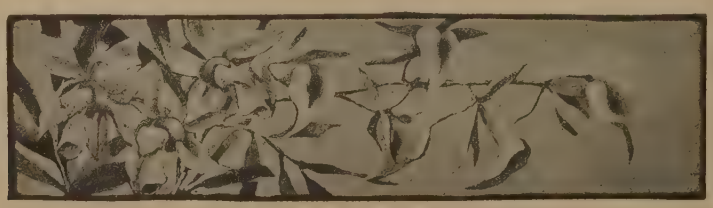
Sarcasm was another of Liszt's chief weapons in teaching. A pupil in making a skip to an A flat struck A. "How stupid it is of Bechstein [the piano manufacturer] to put his A so near the A flat," was all that the teacher said. "You must be very fond of scrambled eggs," he remarked to a pupil who had given a very blurred version of one of his own works.

Chopin's piano-playing was of less dynamic force than that of other pianists, therefore, with him, a forte would have all the effect of a fortissimo. He would never leave this gentler mode of dynamics, and once, when Prince Lichnowski offered him a louder toned piano for concert use, he declined it, saying that it did not suit his manner of playing. The whole tendency of modern piano-playing is toward orchestral effects. This may not be wrong in the case of a Paderewski, a D'Albert, or a Rosenthal, but it leads us to think that a course of study upon the clavichord, which Dolmetsch is now reintroducing, might present practically the claims of the softer side of music.

Oversentimentality is a fault of expression that is not so prominent in the present age, thanks to Wagner and Richard Strauss. There was a time when amateurs felt it almost necessary to weep upon the keyboard when they were playing a Chopin nocturne. That has been changed for the better. The improvements in the pedals of the piano have added much to modern expression. Chopin won his best effects by use of the pedals, and once said, "The correct employment of the pedal remains a study for life."

We cannot better close this brief outline of a great subject than by citing a few words about the tempo rubato (the soul of modern music) spoken by Paderewski in Mr. Finck's interesting book on "Success in Music." He considers this irregular tempo to be as natural as the human heart, which, under the influence of emotion, ceases to beat rhythmically. He considers that Bach, Haydn, and Mozart sensed the need of such a rhythm and at least outlined it. He believes that it should be employed in Beethoven interpretation. He believes that in all schools the performer must be given a certain amount of liberty, of discretional power.

After all, then, our chief advance in expression has been in a more intelligent recognition of the rights of the interpreting artist, and the most of this can be summed up in two things, intelligent individualization and freer tempo.



IX. NEGRO AND INDIAN MUSIC

By Arthur Elson

IT has been charged that the music of the negroes, as developed in plantation life, is not strictly American, but really African in part. But although the negroes of the United States come from African sources, their music is wholly an American product.* The music of the African tribes is altogether different, and far more primitive, and African instruments were much cruder than the banjo of the plantation darky. This school of American music was brought forth by the life of the cotton-field, the camp, and the river. Its cheerfulness was often replaced by the melancholy of the slave or the fervor of the ecstatic religious devotee.

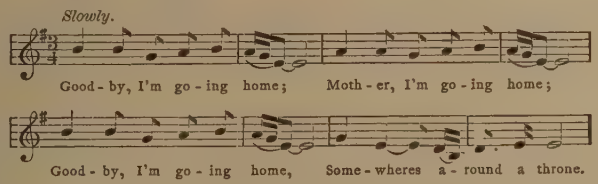
The folk-songs of the plantation show melody, direct emotion, and a harmony that is simple but effective. There are really three styles of negro melodies, the lively, the plaintive, and the somber bits of tonal power that may, after all, be an untraced heritage from Africa.

The plantation school has raised a host of imitators. By far the best of them was Stephen Collins Foster, who was at his best when composing in the plantation style. "My Old Kentucky Home," one of his greatest successes, is a remarkable example of the tender melancholy found in such negro songs as "Nobody knows de trubble I've seen," or "Swing low, sweet chariot." Foster's "Old Folks at Home" has become, with "Dixie," the favorite song of the Southern States. There is an extreme simplicity in all these songs, and the harmonies are almost wholly based on the three chords of the banjo (tonic, dominant, and subdominant); but it is a simplicity difficult to attain, and one that need not be disdained by the very greatest composers.

The lively vein of the negro music is the one that has had the most effect, if not the most important; for it is responsible for an immense amount of recent popular music in the United States. The much-used "rag-time," that came into being at the close of the nineteenth century, is popularly supposed to be an imitation of the plantation tunes. Doubtless it was so intended, but the negro is not responsible for the all-pervading St. Vitus dance in tones that his white brother has brought forth. Rag-time probably means "ragged time," or syncopations, giving accents and rhythms that are unexpected. The negro uses them, but not as though they were the daily bread of musical existence. Some of his tunes have the syncopated style of "A Georgia Camp-meeting," but others are more regular in rhythm, like the Civil War song "Say, darkies, hab you seen de massa."

Some of the religious songs of the plantation camp-meetings show this liveliness of style. Their marked rhythm, their wild ecstasy, and their strong dramatic effect made them very much like the music of scriptural times, as nearly as we can tell. The clapping of hands, stamping of feet, or even walking about, suggest Miriam leading the timbrel-players in the well-known Biblical song. The words of the negro tunes were not always strictly clear, as when they used the refrain of "Jews, screws, defidum" instead of the original text, "Jews crucified him." But usually the poetry was earnest and genuine, if not of a very high order.

The third style of negro music, consisting of more gloomy and powerful effects, is less extensive and less well known than the two others. It includes many of the negro songs in the minor mode, and very often uses the flat seventh. The following brief example, sung in Kentucky, is a suitable illustration of the vein of somber strength.



This is a style that is entirely overlooked by many historians, and one that is not often represented in the printed collections. It is one that would appeal rather to the trained musician than to the general public, which does not wholly understand the minor mode.

Some composers, wishing to build up an American school, have made plantation themes the basis of orchestral and other large works. A leader in this field was George W. Chadwick, who made use of native material in the scherzo of his second symphony. But the greatest composition of this school is the ever beautiful "New World" symphony ("Aus der neuen Welt") by Antonin Dvořák. Here the varied styles of the negro music show at their best—liveliness in the allegro and scherzo, a most exquisite tenderness in the slow movement, and strong minor effects in the finale. Dvořák wrote his own themes, but he caught perfectly the true spirit of the negro music. This music may properly be used to found a school, because concert audiences are familiar with its characteristics. They can appreciate the native appeal of a "New World" symphony in the same spirit that the Germans showed when they applauded their own folk-music in "Der Freischütz."

With Indian music the case is different. Folk-music, by its very name, is music that is known to all the people. As a matter of fact, very few of the whites in America are at all familiar with the Indian music. Investigation in this field has been of comparatively recent date. It includes the work of Alice Fletcher, Theodore Baker, John C. Fillmore, Frank H. Cushing, Frederick R. Burton, J. Walter Fewkes, Natalie Curtis, and others. But in spite of enthusiastic re-

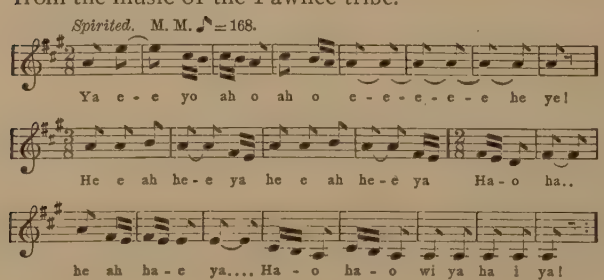
*For a different view, expressed by a contributor, see "Nationality in Music," in this section.—Ed.

search, Indian music must remain exotic for a long time, if not forever.

In "The Indians' Book," a large first-hand collection of their songs and stories, Natalie Curtis writes: "No one who has heard Indian songs in their own environment, under broad skies amid the sweep of wind and grasses, can fail to feel that they are there a note in a nature symphony." The manner of singing, too, has much to do with the effect. Expression, embellishments, slurs, gutturals, and strange accents play their part in the performance. Even the quality of voice has its effect. The plains Indians, who contend with wind and distance, have developed strident voices, while among other tribes a more mellow tone is heard. Of the three elements found in music—rhythm, melody, and harmony—the Indians lay their emphasis on the first. Harmony they possess not at all, and their melodies are sometimes extremely simple, but the rhythms they employ are more complex than those of any other music. They seem very fond of quick changes from even time to triple and back again. They also use frequent alternations of slow and rapid tempo. This must not be considered a defect, but it certainly is a radical difference from European custom, which discarded the changing time-signatures of Lulli for the more stable rhythms of the classical period.

There are two points of Indian song that cannot well be recorded in our notation—differences of pitch in many cases, and a rhythmic pulsation on sustained notes. Some sign for the latter could be easily devised, for it shows much resemblance to the vibrato of the violin. But the former is sometimes a more important obstacle in the path of accuracy. The Indian tribes differ among themselves in this respect. Miss Fletcher and others state that the Omaha music is based wholly on our intervals, while Dr. Fewkes finds that the Moqui songs are founded on a scale that differs noticeably from ours in pitch. In the few cases where Indians have sung at the piano for white musicians the difference in pitch was always apparent.

The Indian songs, then, are strongly rhythmic in character; often deviating from our scale, but usually capable of being recorded in it with approximate accuracy. They show a tendency to repeat certain figures—a device that is not unimpressive. Many of them are based upon the pentatonic scale, which consists of the intervals given by the black keys on our piano. This is a scale that appeals much to primitive peoples, and can show effects of the greatest beauty. The old Scotch songs were composed in this scale, and China has used it for centuries. As an illustration, the following will serve. It is a song of rejoicing, from the music of the Pawnee tribe.



This song is chosen at random from the collection in "The Indians' Book." It shows clearly the pulsation and the pentatonic scale effects. Miss Curtis states that it was not always possible to collect a full repertoire of tribal songs, for many of the melodies are sung only in connection with certain festivals. This suggests the fact that a large number are dance songs, to be accompanied by the motions and gestures of sacred and other dances. These have been gradually growing less as the white civilization has penetrated among the Indians; and the old men of a tribe often sang to Miss Curtis a number of songs that were unknown to the younger members. The dance songs include tunes for the war dance, the ghost dance, the barter dance, the lance ceremony, and so on. The other songs cover almost every phase of Indian life. There are sacred songs, love songs, animal songs, greeting songs, lullabies, songs of legends, mountain songs, corn-grinding songs, wailing songs, and even begging songs. So much do the Indians reverence their music that they believe that the "Great Mystery," or Great Spirit, sang the world into being instead of creating it by spoken word.

The Indian instruments are much used in the dances, but they are heard at other times as well. Most important among them is the flute, which is a favorite with nearly all the tribes. Flageolets are used, held straight in front of the player, like a clarinet. There are also pan-pipes, and in some places a rudimentary harp. The drum has always been popular among the Indians, usually in combination with rattles. The Indian drums are of various sizes, and often decorated in very elaborate fashion. The rattles, too, are ingeniously made, and often remarkably beautiful. The Indians are very expert in their use, and are fond of handling them in exceedingly complex rhythms. White students often find that it requires study to play artificial groupings of notes, such as two against three, three against four, and so on. But the Indian performers seem completely at their ease while singing one rhythm and maintaining two others with a rattle in each hand. Their absolute accuracy in pitch is another noteworthy feature of their singing. But not even when using an instrument like the flute do the Indians try in any way to create a harmonic accompaniment. Harmony does not enter into their musical scheme, although some tribes seem able to appreciate it in the music of the white man.

American composers have made considerable use of Indian themes. At the head of the list stands MacDowell, who used a number of them in his "Indian" suite. This is a good musical work, because of MacDowell's genius; but unless our concert audiences are informed of the fact beforehand, they do not know that the themes are Indian. Orchestral music attains its effects by harmony, as well as instrumental coloring, and that makes a deeper impression than the mere melody could ever do. By the harmonies that he uses a composer expresses the effects he desires. The plantation music gains an individuality from its harmonies, however simple they may be; and Indian music, lacking this, remains almost wholly unknown to the general public.

In piano works, Arthur Farwell has used Indian material in sets of little tone-pictures. In the field of

song, Charles Wakefield Cadman has produced some exquisite lyrics, adhering so closely to the originals that his works are practically a skillful harmonization of the Indian melodies. Yet in this case too the beauty of the songs is due to the white composer. Even though many of the Indian tunes are short and fragmentary, they may well be woven into brief tone-pictures or translated into the language of harmony. But they are hardly distinctive enough to form the basis of any school sufficiently important to be called national. They are of interest to the ethnologist, but will always appeal to the musician as valuable curiosities rather than native folk-songs.

PIANO TECHNIQUE

I. HOW TO PRACTISE

By Annie W. Patterson

Necessity for Practice—Sources of Sound-production—The Pianoforte—Preliminary Preparation—Details of Pianoforte Practice—Suggested Course for Piano—Accompaniments—Dance Music—The Organ—Hymn-playing—Violin, etc.—Time-tables.

THEORY without practice is but the shadow of the substance. Practice, as applied to music, is that preparation as well as preservation work which enables vocalists and instrumentalists to win a public reputation. The musician who cannot give some practical demonstration of his calling, as the result of his practice, holds his title but by courtesy. It is true that many teachers, critics, and composers, though they have attained the highest eminence as musicians, by no means pose as executive artists. The keeping in practice is merely a matter of continuous muscular exertion. It depends as much upon the circumstances as upon the inclination of the individual; but at one time or another, generally in early youth, the musician, properly so called, has gone through some practical drill in qualifying either as singer or performer. All cannot hope to be Pattis or Paderewskis. But we expect a man who calls himself a carpenter to know the use of his tools. So the musician's first care is—or should be—to get acquainted with the use of music-making contrivances by means of practice upon them.

The production of musical sounds comes to us through many channels, the most wonderful of all music-making instruments being the human voice. Vocal practice is treated of elsewhere in detail. In passing, it is interesting to note that, since the development of the modern science of harmony, an instrumental accompaniment—whether it be supplied by the orchestra, the organ, or the ubiquitous piano—adds to the charm of singing. Apart from the growing complexities of solo work, the increasing demand for good accompaniment necessitates a redoubled attention to practice on the part of instrumental performers.

As human ingenuity perfected the instrumental sources of music-making, it became necessary to learn the best mode of performance upon them. The breath, the throat, the tongue, the lips, the arms, hands, fingers, and even the feet (as in organ pedaling), were called into the service of the musician and were taught exertions other than normal. As the musical resources of instruments were developed, more and more assiduous practice was found needful to attain to the desired amount of suppleness and speed in execution. So highly did the great Mozart regard practice in the perfecting of his art, that he is said, toward the close of his career, to have regretted that he had not practised enough.

Of all modern musical instruments none has obtained greater popularity than the pianoforte. "Without a keyboard instrument," says Algernon Sidney Rose in his entertaining booklet "On Choosing a Piano," "no house is considered to be completely furnished." The reason why the pianoforte is an especial favorite among keyboard instruments is explained by the fact that its accommodating mechanism brings all kinds of music within the scope of listener and performer. Apart from the vast wealth of selection to be found in piano music proper, there is a very large public which intensely enjoys the much-criticised "arrangements" from all the great concerted "forms"—whether of operatic, orchestral, chamber, or Church music—on the domestic instrument. Again, as an adjunct or accompaniment to the voice and most other solo instruments, there is no means of music in the home to rival a good piano. From aiding the child when learning his notes, to assisting the composer in evolving his aspirations, the household piano may well be characterized as the "fairy queen" of the enchanted realm of music. As an ever-ready source of music-making, practice to obtain proficiency upon the pianoforte deserves the primary attention of the musician.

The great secret of beautiful playing on this instrument lies in the independent and well-regulated touch of each finger on the hand. To acquire this power is no easy thing. It may take months, and even years, of patient practice. Our five fingers are unequal in size, shape, and capability. Their positions in regard to the palm of the hand, as in connection with each other, give to every member of the group an individuality which we emphasize when we speak of the thumb, the index, the middle, the "ring," and the little finger. The pianist, at the commencement of his study, knows how much easier it is to strike a note firmly and clearly with the first and second fingers than with those known as the third and fourth. The reason of this is explained upon examining the tendons of the hand. Both third and fourth fingers are more fettered by digital ligaments than are the remaining two and the thumb. The hand is constructed rather to grasp or to hold than to strike, in the sense in which we attack, or touch, the keys. Preliminary aids to strengthening the arm-muscles, and therefore the wrist and hand action, have been found helpful by many executants. Since the days of Johann Bernhard Logier, who invented the chiroplast, which was supposed to act as a hand-guide, there have been several mechanical contrivances for lessening the initial drill of the pianist. Among these, Macdonald Smith's series of muscular exercises, "From Brain to Keyboard," appear designed upon healthful and sensible

principles. Any wholesome gymnastic exertion which will bring the arm-muscles into play and induce a regular circulation of the blood from shoulder to finger-tip, will materially assist the hand in subsequently gaining suppleness and agility at the keyboard.

Coming to work at the pianoforte itself, the student should sit right at the center of the keyboard, with seat adjusted to that height which enables the lower arm, no matter in what part of the gamut a scale-fragment be played, to move parallel to the ground, or the plane of the instrument. The pianist-composer, John Field, among others, recommended the playing of preliminary finger exercises with a small coin on the hand, so as to obtain the tranquil pose of that member. It takes time to get the right art of finger attack. Notes must be struck, not with stiff hand, but with perfectly free knuckle-joints. First, in order of keyboard practice, should come five-finger exercises, those of Aloys Schmidt being as helpful as any others; and, in the case of young pupils, Mrs. Curwen's "Child Pianist" will be found of great assistance. Then might follow a thorough study of the scales, major and minor, in their various positions. These should be played slowly at first, evenness of excution being never sacrificed to speed. Afterward, to alternate scale-playing, sixths, octaves, and chords may be practised with loose wrist. In these exercises the hand should be allowed to swing up and down freely from the wrist-joint, as if upon a well-oiled pivot, the least stiffening in the forearm muscles being prejudicial to the desired effect.

All these departments of pianoforte drill must be developed gradually, and each species of exercise—five-finger, scale, and wrist-work—requires careful reiteration and daily repetition until perfect facility is gained. To avoid the monotony and drudgery, both to performers and listeners, of such essential strumming, contrivances like the Virgil practice-clavier—in which "clicks" instead of tone register the accuracy of touch—are worthy of consideration. The keyboard can be utilized (1) for the toneless practice of exercises; (2) the registration of degrees and accuracy of attack by means of up and down clicks, weighted according to requirement; and (3) the playing of pieces with the piano in its normal condition—quite a triumph of modern means to an end in aiding the pianist's practice.

Further details of pianoforte practice may be summarized briefly as follows, the scheme being capable of contraction or extension to meet individual needs: Having attained the free knuckle-joint attack of finger, even and clean execution in scale-playing, and crisp, full grasp of intervals and chords taken with loose wrist, such studies as those of Czerny's or Cramer's might be worked at with advantage. Then should come a progression through the classics, such as is suggested by Charles Hallé's "Practical Pianoforte School." Clementi's sonatinas might lead to Mozart's sonatas, and eventually to J. S. Bach's suites, preludes, and fugues. A course of piece work, varied by judicious drawing-room selections, might be from Schumann's "Album for the Young," through Mendelssohn's "Songs without Words," to Beethoven's sonatas. Miscellaneous playing could include Heller's "Nuites blanches"; Chopin's waltzes, mazurkas, nocturnes, etc.; Liszt's rhapsodies, etc. Among favorite classical show-pieces, probably such items as Mendelssohn's "Andante e Rondo Capriccioso," Weber's "Hilarité" and "Invitation," Chopin's "Berceuse" in D flat, and Raff's "La Fileuse," are a few of the most widely acceptable.

A feature of pianoforte practice should be the playing of accompaniments. Whether for vocal, violin, or other instrumental solos, the pianoforte is an invaluable addition for "filling in" harmonies, and the art of playing accompaniments is one which every pianist ought to cultivate. An accompanist should never be too assertive. At the same time, especially with nervous or uncertain soloists, some "lead," or encouragement, is often required. An experienced musician will know exactly what to do. In the case of amateur accompanists, however, the following hints may be useful. If the attack of a singer is clear and decisive, and every nuance of expression and rate of performance are carefully observed, it is the duty of the accompanist to keep with, rather than anticipate, the solo part. In all cases the faculty of looking ahead must be cultivated. Even eminent singers occasionally take liberties with the music they interpret. Sometimes pauses are overlooked, or in working up to a climax the speed is accelerated, although no indication that this should be done appears in the notation. Under such circumstances a good accompanist will accommodate himself in such a way to the solo performer that no sense of dragging or want of agreement is conveyed. In this way the playing of accompaniments really implies that the individuality of the accompanist must be subservient to the soloist. This is only as it should be; otherwise the fitting in of parts—the background of the picture—is incongruous.

Accompanying at choral rehearsals is splendid practice in the matter of time-keeping. The playing with solo parts can be learned only by assiduous work with the solo performers themselves. Quick perception—intuition, one might almost say—and the gift of reading at sight are essentials for the successful accompanist. If a friend can be found who is willing to rehearse dozens of songs, or solo violin, cello, or flute pieces daily with a budding accompanist, great progress will soon be made. But accompaniments should not be played rashly, or without due practice and consideration. Before offering to accompany even the simplest song, a player should glance through the music, note sudden changes of time and key, and, while playing, try to adapt his views as to speed and mode of rendering to those of the vocalist. The playing through of operatic rôles, or the trying over of such crucial tests in sight-reading as Beethoven's wonderful violin and pianoforte sonatas, can be recommended to the advanced student as the best imaginable practice.

Before leaving this subject, a few words might be said about the rendering of dance music. The string or brass band usually supplies the most acceptable aid to ballroom pirouetting. Failing this, the piano is frequently in evidence, and much depends upon the player if dances are conducted with spirit and success. A natural sense of rhythm, as well as intimate knowledge of the steps and positions of the various dances, greatly aids the performer. The main point is to mark strong accents definitely, and not to falter if a slight slip or mistake is made. As in playing accom-

paniments—and, to a certain extent, dance music is an accompaniment to bodily motion—the best way to become an accomplished executant is to have plenty of practice with the dancers themselves. Just as in accompanying, a fair share of the reading-at-sight faculty is requisite here. Even if chords are occasionally missed, the point is to go ahead, and aim at interpreting the swing of the music. Repeated practice and experience soon enable the player to clear his performance of error. A note-perfect rendering should, of course, be aimed at. Basses need special attention. The habit of some players of dance music, who dash at any bass and fill in left-hand chords by ear, is to be strongly deprecated.

Passing now to consider the organ, we must first remark that it is not so easily accessible for practice as the pianoforte; instruments at musical institutions, public halls, organ builders' establishments, and places of worship—outside the rare occurrence of a pipe organ erected in a private house—offering the student the main facilities for acquaintance with the king of instruments. A certain amount of manual work, such as the middle portion of J. S. Bach's "St. Anne" organ fugue in E flat, may be prepared in advance at the piano; but the true organ touch, pedal-playing, contrast and balancing of manuals and stop-registration can be learned only at the instrument itself. During organ-practice hours, particular attention should be given to these points, special care being devoted to the use of alternate feet on the pedal-board, and the clean legato grasp, so inseparable from the methods of the best organists. Stainer's organ primer (the Novello series) will greatly assist the learner in these matters. An organ course should include selections from J. S. Bach's chorales, shorter pieces, and preludes and fugues for the organ; Mendelssohn's preludes and fugues and organ sonatas; Handel's concertos, overtures, etc.; and Best's organ arrangements from the great masters. Miscellaneous items may be culled from the compositions of Batiste, Guilmant, Lemare, Lemmens, Rheinberger, Rink, Silas, Smart, Spark, Stewart, Widor, and many others.

An important part of the church organist's duties is the playing of hymns. Various plans are adopted in different churches for the announcement and performance of the chorale or hymn. Possibly the most acceptable, when congregational singing is encouraged, is that the officiating clergyman should first give out the number of the hymn and read an opening line or stanza, the organist afterward playing over an opening phrase. The beginning of a hymn is important. After the announcement and phrase-playing, as described, the performer should make a distinct break, taking the hands entirely off the keyboard. The tonic pedal should then be decisively sounded, and the choir trained to come in with absolute exactitude on the initial manual chord. When singers—as is often the case with amateur and rural choirs—are inclined to drag, some bright octave or four-foot stops should be drawn, and chords may even be played in a slightly detached or staccato manner until the correct rate of speed is restored.

The words of a hymn should always be watched carefully by the player, so that the sense of the verses may be reverently and becomingly interpreted. In a line like "In life, in death, O Lord, abide with me," a good musician will so account for the commas—making a suitable rallentando at the same time—that the contrast intended may be conveyed without undue exaggeration. Color-painting, with appropriate stops, is quite legitimate if not overdone. At the same time, great discretion and good taste are demanded from the performer in this respect lest anything in the way of ludicrous effects be unconsciously produced. The roaring of lions and a tempestuous deep do not always call for the thunder of a trombone pedal-stop. Often the use of soft sixteen-foot stops, or even the lifting of hands off the manuals so that the voices may sing unaccompanied, has a thrilling effect at solemn passages. When a strong forte is demanded, a full rather than strident registration should be sought for. Stop-combination depends on the nature of individual organs. The oboes on some instruments are execrable, while on others the delicate reedy flavor of such a stop is a coloring inestimably useful both for solo and accompaniment work. Experience and practice on various types of organ can alone teach tasteful stop-registration.

In practising the violin, the cello, and kindred instruments, certain portions of the pupil's time should be devoted to such matters as bowing, phrasing, the production of harmonies, etc. As in the case of practice upon most wind instruments, seclusion of the performer is advisable. A piano is generally located in a drawing-room, and usually must remain there. But a violinist may betake himself and his fiddle to a garret, and there draw forth preliminary wails to his heart's content. Advice to violinists, and to players on most orchestral instruments, might be summarized as follows: Select a remote quarter for preliminary practice, so as not to disturb others. Aim, when practising, at beautiful tone above all things, and learn to control it at will. Never waste time upon practice of pieces beyond the ability, and avoid undue length in selections to be prepared for concert playing. Hear as many good soloists on the chosen instrument as possible; mark their style, phrasing, etc., and prepare the pieces they perform accordingly until individual powers of interpretation are attained. Keep the instrument in good order, free from dust, and always pleasant to look upon and handle. Join a good quartet or orchestra, if possible. Nothing is better than ensemble practice.

A great deal might be written about technical exercises for various instruments. Each teacher and most music-school authorities have their favorite "studies" in the different branches to commend; and no doubt in the multitude of counselors there is wisdom. But the earnest student, no matter what instrument he chooses to excel upon, will soon learn to realize that his chief aims must be the production of beautiful tone and accurate execution; and to attain to these, the main point is to drill the five fingers, the arm-muscles, and —in the case of vocal music and wind instruments— the breath. The Messrs. Augener (London) have issued a highly instructive series of "Guides through Music Literature," which should prove most helpful to the self-taught student. These include the arrangement of pianoforte, violin, violoncello, organ, and song exercises and pieces, graduated according to difficulty. These, with such publications as Charles

Hallé's "Practical Pianoforte School," already mentioned; the Studies of Cramer, Czerny, etc., and Köhler (for very young pianoforte students); the famous Violin Schools of Bériot, Hermann, Spohr, Vieuxtemps, etc.; the Violoncello Etudes of Davidoff, Dotzauer, Duport, and others—most of them brought out cheaply in the "Edition Peters" (Leipzig); Organ Albums of Best, Rinck, etc., together with the chorales, preludes, and fugues of J. S. Bach, and Mendelssohn's preludes and fugues and organ sonatas, should form good groundwork for solo players on these different instruments. The catalogues of the eminent firm of Breitkopf and Härtel (Leipzig) contain also most of the essential studies for performers on all instruments, while the stringed trios, quartets, etc., of Haydn, Mozart, Beethoven, Brahms, Schumann, Dvořák, etc., offer ample material for really devoted study and practice.

Regarding the time for practice, morning hours are best when these are convenient. Practice should not be persisted in at times unpleasing to other people, no matter how much the enthusiast may desire to play scales at 5 A.M., or polish up show-pieces with midnight oil. The preparation of regular time-tables of practice is to be recommended, if resolution is sufficiently strong to adhere to them faithfully. The following proportional division of an hour's daily practice upon any instrument may be suggested: Devote ten minutes each to (1) arm, wrist, and finger drill; (2) scale-playing; and (3) technical exercises. The remaining half-hour of the time could be divided into segments of twenty minutes to the classical, and ten minutes to the secular piece under immediate study. A division of this kind may be considered a fair apportioning of labor, as it gives half the time to drill-work proper, and half to applying the drill. One hour a day seems quite enough for young children, nor should the delicate overstep it without due consideration. It may also be found sufficient to keep a trained player's hand in, and if judiciously spent it is more helpful to the student than three hours or more. For the mind is apt to wander, and physical energy to grow weary, during a protracted period. If, however, three or more hours must be given daily to practice, it should not be taken consecutively but with intervals for rest or exercise between. The amount of time given to practice must, however, be left for individual decision according to inclination and circumstances.

II. THE PIANO AND HOW TO PLAY IT

By Mark Hambourg

A Modern Instrument—Spinet and Harpsichord—First Piano—Development and Use of the Piano—Great Composers and Players—Study and Practice for the Piano—Outline of a Course of Work.

WE are all so familiar with the modern pianoforte that the fact of its being an entirely modern instrument is apt to be overlooked. Yet, whereas musical instruments of one kind or another have existed from the very earliest times, the inventions that gradually led up to the piano as we know it to-day were not made until about 1720, and no very material advance was made till considerably later than that date.

The most familiar forms of early stringed instruments played with keys like the piano were the spinet and the harpsichord. The world's first pianoforte was invented and produced by Bartolommeo Cristofori, a Paduan harpsichord-maker. His invention of the escapement and check action early in the eighteenth century opened up such wonderful possibilities for the instrument that from that day harpsichord-makers and inventors everywhere brought their attention to bear on the subject, and pianos of various kinds were manufactured with varying success by a number of different makers.

About the year 1800 John Isaac Hawkins, an English civil engineer living in Philadelphia, invented and produced the cottage piano, or upright grand. In his original instrument he anticipated almost every discovery that has since been introduced as "novel," and the whole history of pianoforte manufacture began to undergo a complete change from that time.

Having spoken of the development of the instrument, it may now be as well to speak shortly of the development of its players and the music that was written for it. From the time of Palestrina to that of Bach and Handel instrumental music was written chiefly for the organ. From then till the time of Beethoven, Haydn, and Mozart, instrumental music quickly developed; the piano took a predominant place, and there rapidly grew up a romantic school of musicians, among whom may be mentioned Schubert, Weber, Mendelssohn, Schumann, and Chopin. The last named, I venture to say, represents the climax of the development of pianoforte literature; for while all the great musicians from Bach to Chopin contributed their best ideas and creative power, yet Chopin was undoubtedly the bard, the tone-poet, the soul of the instrument. In his music we find all that is best and most full of meaning, his works containing all those varying contrasts that make piano music so fascinating. Tragedy and romance, heroism and fanaticism, lyricism and dramaticism, grandeur and simplicity, brilliancy and

restfulness, all are there, and his changing moods follow each other in such quick succession that his music exercises a peculiar charm upon every one who listens to it.

Clementi was the first of a school of virtuosi, among whom may be mentioned Steibelt, Dussek, Hummel, Field, Kalkbrenner, Hertz, and, more recently, Dreyschock, Schulhoff, etc., who were virtuosi of the dry order. Although some of them used their virtuosity in a powerful way and others in a delicate way, they all used it as an end instead of as a means to an end, and all of them played, as a general rule, compositions that gave them an opportunity to show off their brilliant technique and their ability to conquer the greatest difficulties.

Liszt and Anton Rubinstein were the giants who combined great virtuosity with intellect, feeling, and imagination, and it is through them and their followers that piano-playing has reached the highest standard.

In just the same way that almost every one has a different voice, so has almost every one who plays the piano a different touch; and just as the voice can be improved by training and practice, so can the touch be altered. It is toward the matter of touch that the earliest lessons of the pianist should be directed; for the piano is such a sensitive instrument that the improper use of a single finger may alter the tone-color of a whole passage, and since tone-color is such an important factor in musical expression, it is of the utmost importance that the student should have perfect command of the keyboard in this respect.

Of course, the first thing a student has to do is to acquire precision, equality, dexterity, and power. The capacity to modulate the tone will follow. The very name of "pianoforte" indicates that it is an instrument of contrasts, and contrasts are of just as much importance in music as they are in speech. Professor Leschetizky once said: "To make a beautiful composition sound dull and uninteresting is no hard matter, but to make a composition that is itself dull and uninteresting appear beautiful and full of meaning—that is the consummation of the pianist's art!"

Now it will be obvious that, in addition to the ordinary study and practice that are necessary for the acquisition of technical facility, study and practice of an entirely different kind are essential for the cultivation of what may be termed the musical ear, the possession of which is absolutely indispensable. The student must be able to distinguish intervals and chords with discrimination, as well as pitch and all the shades and qualities of sounds, and must train his ear until he can unhesitatingly distinguish every degree of power, beauty, meter, and rhythm. In very many cases it will be found that, while the ear can easily be trained to distinguish intervals and chords, it cannot be so easily trained in other ways; indeed those who have a perfect ear for pitch are frequently quite deaf to qualities of tone, and vice versa. The fact is that the ear is a delicate organ which has to be very carefully treated if it is to do its work to perfection. It is an interesting fact, for instance, that in cases where the ear has constantly to convey certain sounds to the brain, its use is liable to become impaired. It is no very rare thing for the player, say, of a piccolo eventually to become quite insensible, so far as the particular register of his own instrument is concerned, as to when he is playing in tune. He can readily appreciate any mistake made by the player of a double bass or some instrument with a lower register than his own, but, so far as his own register is concerned, his ear may become worn out, so to speak. In the same way the double-bass player may be able to distinguish every difference of tone in the piccolo and be quite insensible to differences of tone in the register of his own instrument. It is thus with the ear just as it is with the palate, which frequently becomes so familiar with certain tastes as to grow, after long and constant use, insensible to certain subtle differences once easily distinguishable. I have diverged to this extent simply to impress upon students the importance of carefully cultivating the ear in all departments equally, and I will now proceed to speak of various technical points which require special study.

I have already referred to the importance of touch. In no branch of piano-playing is this more emphasized than in staccato and legato passages. Good staccato and legato is very difficult to attain, and it therefore requires a great deal of study and attention on the part of the student. In legato playing the wrist must be kept steady to such a degree that a coin balanced upon it remains in position throughout the playing of the passage. One finger must not be raised until the next descends.

In staccato playing, the best is what is known as "finger-staccato," the fingers being made to spring up from the keys as quickly as possible, as though they were touching molten metal, or, in other words, "like a cat walking on hot bricks." There are various kinds of staccato playing, wrist-staccato, wrist and finger staccato, etc., but special attention and work should be devoted to finger-staccato, since this is the kind most used, besides that it develops and strengthens the muscles of the hands and fingers to a very remarkable degree. In staccato as well as in legato playing precision and equality are most important, and the equality must be not only in touch but also in time.

Speaking of equality in touch and time, I may here mention the great importance of devoting plenty of practice to the playing of chords. To obtain proper effect from a chord, all the notes of each chord must be struck with equality of touch, force, and pressure. When practising, in order to make sure that the best effect is being got, the notes of each chord may be divided up between the two hands. After striking a chord several times in this manner and listening carefully to the effect, it is easy to compare the result with the effect produced when the same chord is struck with one hand only. By practising in this way, a fullness and grandeur will be imparted to chord-passages which is very essential.

Before I leave the technical side of piano-playing I should like to call the attention of my readers to the enormous importance of the proper use of the pedals. Anton Rubinstein once explained to his pupils that pedal in piano-playing was the soul and life of sound, since it beautified the tone of the instrument and created many effects which would otherwise be quite impossible. Artistic pedaling is in itself a very difficult art, and requires considerable knowledge of harmony and musical form as well as a highly developed

musical taste. It would be easy to write at considerable length upon the subject, but for our present purpose it will suffice if I mention the following essential rules:

Never use the same pedal for different harmonies.
Never use the same pedal for two different phrases.
Do not use the pedal at the end of a phrase unless there is some special reason for it.
Use the pedal for long, melodic notes. In such cases I always use what is known as the "retired pedal," that is to say, depressing the pedal after striking the note.
All foundation-notes of chords require separate pedaling.
The use of the pedal is very important in climaxes.

Just as knowledge of grammar is necessary in order that a language may be properly spoken and understood, so is knowledge of harmony, counterpoint, and theory necessary to all who aspire to advanced piano-playing. Harmony, counterpoint, and theory are the grammar of music, upon a knowledge of which interpretation and phrasing largely depend. The connection between music and language is very much closer than people usually imagine; music being the expression of thought in sound of one kind, language the expression of thought in sound of another kind. For this reason it is very necessary that all musicians should study declamation. The great actor, when undertaking a new rôle, strains every nerve to make his interpretation of it impressive and attractive, taking advantage of contrasts, climaxes, pauses, emphases, and so on, in order to play upon the emotions of his audience. The pianist's is an exactly parallel case. He, too, must observe his contrasts, his climaxes, his pauses, and his emphases—in short, every movement must be rendered with the emotion that it calls up in him.

This explains the difference which is usually noticeable in the interpretation by different players of the same works. It accounts also for a pianist so seldom playing the same piece in exactly the same way. Pianists are not all equally emotional, consequently their interpretations vary in some degree; while no player is often swayed by his emotion to exactly the same extent every time he plays a particular piece, and as his performance is but an expression of his mood at the moment, it follows that his interpretations must always vary in some degree.

As to the question of phrasing in music, this forms a particularly important branch of study to which special attention should be given. If you have ever listened to a great speaker, you will have noticed that if he has occasion to make use of the same or similar phrases or sets of words more than once he uses a different tone of voice on each occasion. Were he to use the same tone of voice for each of similar phrases his speech would become monotonous, for although the words he utters are of the first initial importance, it is his tone of voice that brings out their full meaning and makes his delivery attractive.

With this end in view each new work that the student attempts should be carefully studied little by little, mastering its general division in the phrases and then obtaining a different effect for each. A musical illustration that I frequently refer to when writing or talking on this subject is Chopin's 20th Prelude. The theme of this prelude may split up into three phrases. In the first phrase, a loud effect may be used; in the second the melody may be brought out by accentuating the top note of the chord, the whole phrase being played *piano*; in the third, which may be played *pp.*, the alto part can be brought out by accentuating the middle note of the chord. Many other differences may be employed in the rendering of these three phrases, each of which may itself be divided into two or four subphrases, so that there are literally scores of different ways of playing the prelude, each of which may be equally correct musically, even though some arrangements may not be so attractive as others. The pianist with originality and imagination will discover for himself methods of phrasing each work he attempts, without necessarily binding himself down to any hackneyed rendering.

In giving the above advice I do not wish it to be understood that I would recommend students to fly in the face of existing traditions regarding the interpretation of certain works. In a general way traditions should be accepted, since they are the result of the experience of the greatest virtuosi. But the student should be influenced and not enslaved by them, and when his mind and musical knowledge are properly developed they may receive the impress of his own individuality.

When once he has mastered the art of phrasing, the student will be in a position to introduce into his playing that "tone-color" without which music is cold and unconvincing. If one studies the works of the great composers one cannot help remarking upon the largely different methods that each employs for the introduction of color into his music. The student cannot do better than examine the works of Schumann if he wishes to acquire a knowledge of beautiful color-schemes. Indeed, I regard the study of that master's work as a very important factor in musical education, since the pupil will thenceforward be able to compare the color-schemes of other composers with those of one who was in this respect master of them all.

As regards what musical literature should be studied, while, of course, it is impossible for me here to deal with such a question fully, I may yet perhaps outline a rough course of work.

For beginners, I recommend the études of Czerny, known as the Etudes de Vélocité, 40 Daily Studies, and the études, Op. 740 (4 books); also the Cramer études, Hans von Bülow edition. For the higher development of technique, I recommend Clementi's "Gradus ad Parnassum," Tausig's edition; Chopin's études, Op. 10 and 25; the Schumann-Paganini studies, and all the Liszt and Rubinstein studies.

The compositions to be worked upon should be selected from the sonatas of Haydn, Mozart, two and three voice inventions and preludes and fugues of Bach, Scarlatti, Dussek, Clementi, Reinecke, Hummel, Weber, and Beethoven; the nocturnes of John Field, various compositions of Hiller, Moscheles, Thalberg, etc.

Of the romantic school, careful study should be given to selected works from Schubert, Mendelssohn, Schumann, Chopin, Rubinstein, Liszt, and, among quite modern composers, Brahms, Grieg, Tchaikovsky,

César Cui, Rachmaninoff, Arensky, Saint-Saëns, and César Franck.

I also strongly recommend all students to play, if possible, ensemble music; that is to say, with a trio or quartet of stringed instruments, or even with another piano part, since this helps to develop a knowledge of rhythm and the power quickly to interpret the meaning of a composer.

In conclusion, I would emphasize the great need there is for emotionalism and originality in music. Here, as nearly as I can remember, is something that Rubinstein once said: "The musician who only plays the music of a composer correctly will never move from the ranks of the mediocracy. Only when he learns to express the inmost thoughts of the composer and the breadth and greatness of a composition will he himself have a chance to become great. To be able to execute a musical composition one has to work hard to master the technique, but to interpret it well, much more than technique is required. What is wanted is the capacity for feeling, imagination, and analysis. The pianist who possesses these qualities is able to transform a poor composition into a beautiful one. Even in the works of great composers he will be able to discover and bring out effects which the composers themselves omitted to mark, or which did not occur to their minds. Mediocrities are afraid to be individual and original, though those who have no talent for originality or individuality may be very good executants."

III. THE OCTAVE STACCATO

By Xaver Scharwenka

Positive and Negative Staccato—Position and Attack in Each—Production of the Octave Staccato—Development of the Muscles Used in Staccato Playing.

THERE are two kinds of staccato, the positive and the negative. These may be subdivided and named according to the particular anatomical joints that come into play in the different species of attack. Thus we speak of elbow (or forearm), wrist, knuckle, and finger staccatos, and finally these forms occur in every imaginable combination, two, three, or all the joints acting simultaneously.

In the production of the positive staccato the member used in the attack is held above the keyboard at a given point, the distance of which is determined by the volume of sound required. The seat of the motion depends upon the kind of staccato to be produced. It may occur in elbow, wrist, knuckle, or finger joint; but in all cases the attack is made swiftly and with a rebound, the attacking member being brought back immediately to its original position above the keys, and kept there till the playing proceeds.

In the production of the negative staccato, on the contrary, the member used in the attack is in contact with the keys. The fingers must *feel* the keys. The attack is made by a sudden pressure, after which the attacking joint is swiftly withdrawn, to be brought back to its original position in contact with the keys.

In octave staccato we must pay special attention to the position of the hand, the elasticity of the joints, and the sources of strength brought into play in the movements of hand and arm. It should be observed that the position in octave staccato is unlike that usual in the playing of scales. The hand must point outward, so that it forms an angle with the arm. This enables the thumb to reach both the upper (black) and lower (white) keys. The thumb, which is bent a little, is held at an angle of forty-five degrees to the keyboard, resting on the lower key near the upper one in negative staccato, and above the white key in the same relative position in positive staccato. The thumb is straightened out in moving to the upper key, which should be near its tip, the other fingers remaining slightly bent.

This position of the hand, combined with the movement of the thumb just described, makes unnecessary the forward and back movement of the arm (from the shoulder), which has so bad an effect on the equality and rapidity of the successive tones. The upper arm, however, must carry the hand (and forearm) in its motions to and from the center of the keyboard, and not remain passive, as is the case in ordinary finger exercises. The attack itself, which follows these preparations, is made according to the laws of the staccato.

In the production of an octave staccato in quick tempo, the wrist-joint is usually the hinge which is the seat of motion. In slow octave movements, requiring a greater application of strength, it is better to use the elbow-joint. The hand must always keep its elasticity. This is of the greatest importance, from its influence on the quality of the tone. A hard, rough sound can usually be traced to stiffness of the wrist, even when the wrist itself does not enter directly into the attack, as, for instance, in running a scale.

Attention should be given to the fact that in the production of the octave staccato by a combination of the elbow and wrist joints the forearm originates the motion, while the wrist-joint remains flexible like a hinge.

The source of the strength used in the production of a wrist-joint staccato is derived from the lower arm, that for the elbow-joint staccato from the upper arm. In combinations of the two joints, much attention should be paid to the rational development of the muscles separately and in unison. Repetition in octave staccato is a special subject requiring separate study.

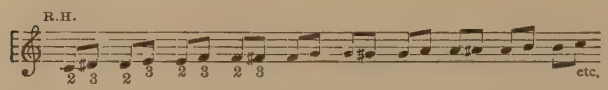
It may be well to state that the fatigue which is produced so easily, and the resultant stiffness of the wrist, may be avoided by an up-and-down movement of the forearm at the wrist. The lower arm supports the movements of the hand.

IV. THE TWO-FINGER EXERCISE

By William Mason

Rhythm in Technical Practice—Value of Accent—Control of Muscles—Elasticity, Rigidity, and Relaxation—Correct Attack.

SEVERAL of Liszt's pupils who have since become famous were once discussing the amount of time wasted in dry mechanical exercises—time which, better applied, would speed the student well on his way to virtuosity. Liszt came by and listened. "All true," said he, "but there is one little exercise which has come down from Hummel that I never give up. It does me more good than anything else."

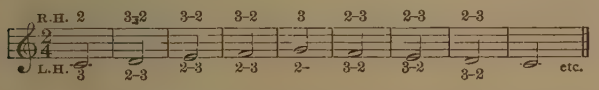


Although Liszt was too musical to practise unrhythmically, he played this two-finger exercise on this occasion without rhythmical form—simply as a gymnastic exercise on the keyboard. When I came back from Weimar and began to teach, it occurred to me that the mind was not infinite, but finite, and required a definite beginning and end to all its mental processes; that it could not preside successfully over a series of motions repeated indefinitely—that is, without symmetrical form. This discovery was an entirely new standpoint for the study of technique, and I have lived to see the idea of rhythm as a factor of technique leaven all the judicious teaching in America. "It is strange," said Moscheles, in his "Recent Music and Musicians," "that no one has ever thought of writing scales with accents. One day some one will found an instruction book on this plan." But scales had already been taught thus in New York for ten years.

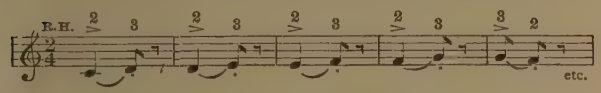
It is a practical fact that the mental energies will cooperate to carry the fingers through any given correlation of motions of which the end is foreseen, when they will flag and fail in the same routine if not braced to reach a certain definite goal. I applied this principle most successfully in the cultivation of velocity in scales and arpeggios by what racing men would call "spurts," as set forth in my "Touch and Technic." Even in the study of the elementary exercise with which this paper deals, a pupil will soon acquire a neat and precise delivery by the use of accents, when without them he will falter and stumble helplessly. Accent concentrates the thoughts, introduces symmetry, and therefore comparison, and thereby makes the first steps toward equality of touch and toward feeling for phrasing. There are two other advantages to be derived from the use of accent. Each accented tone should be preceded and followed by a tone contrastingly light. Thus the tension of the accenting fingers is followed by the relaxation of feeling caused by the preparation of the following soft tone. This promotes an elastic and controlled attack, and as a consequence a musical quality of timbre. Coincident with the cultivation of the rhythmic instinct arises a desire for intelligent musical expression. Thus the artistic talent of the student is awake and active from the first lesson to the last. Properly applied, the principle of accent brings the whole field of technique—scales, arpeggios, double notes, chords, and octaves—under control. A lady once asked whether Schumann wrote "Kreisleriana" to illustrate the two-finger exercises, or Mason got the two-finger exercises out of "Kreisleriana." That is a good example of the way in which these accented motions enter into the most advanced technique and the most romantic composition.

The first step toward any correct motion whatever in piano technique is to obtain control of the muscles of the fore and upper arm. Draw your finger sharply from the key, and at the same time drop your wrist and watch how the muscles concerned contract almost up to the shoulder. Before your finger can make a correct attack on a key you must learn to relax all these muscles at will. "Devitalization" is the modern word for this complete relaxation. Perhaps "limpness" is simpler and more expressive. After the attack the muscles used must immediately become limp, and the muscles which should not participate in the motion must be limp all the time. To acquire this

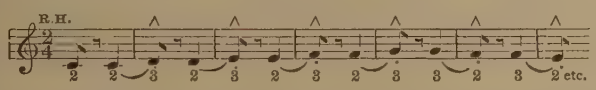
control, practise letting the whole arm fall so that some one finger—say the index—comes in contact with a key, and hooking on to it prevents the arm from falling farther. This is "attack by weight." "Attack by weight" and "attack by stroke" produce totally different qualities of tone. The mellow and full quality obtained by attack by weight should be acquired as soon as possible. The exercise described above may be called the "drop and finger-tip." It should be practised with each finger separately. When you have observed the sensation of the muscles of your arm so that you know when they are contracted and when relaxed, study the following exercise. Begin every exercise with a down-arm touch—i.e., attack by weight, but proceed with this one with attack by stroke.



Lift the fingers high from the knuckle-joints and bring them down promptly and firmly upon the keys. The muscles of the attacking finger, which are located in the forearm, may be tense at the moment of stroke, but must relax as soon as the attack is made and the weight of the finger has settled on the key. In any technique where the seat of the motion is in the knuckle-joints the finger must be elastic, free from the weight of the arm until after the attack is made.. When the finger has acquired the ability to rise freely in the knuckle-joint the process of strengthening that joint begins. This I accomplished by means of the following exercise, which must be practised by each pair of fingers in turn.



Raise the index finger in the knuckle-joint and strike C (the first key) with an accent, and therefore with some muscular tension. Stretch out the third (middle) finger and flex it inward suddenly so that the tip touches the palm of the hand. Do this firmly, but without accent; the tone produced must sing. In practising this exercise very slowly, to strengthen the fingers, there may be some tension in wrist and forearm. But later the whole arm must be perfectly quiescent, while the muscles belonging to the attacking fingers are in elastic tension during stroke, and then immediately relaxed. There is a difference between elastic tension perfectly controlled by the will and that turgid rigidity of the muscles from which they refuse to recover. An habitual condition of involuntary contraction originates all the abominable sounds made by heedless thumpers, and is responsible for nearly all the failures of diligent students to acquire execution. In extreme cases it produces cramp, and ultimately scrivener's paralysis and weakened sinews. The palm of the hand in particular must not be allowed to become rigid. The normal condition of a pianist's hand in the act of playing is one of controlled elasticity, combined with relaxation at the completion of each motion; that is, the hand must not be flabby—it must be supple. In all correct attack three moments are clearly discernible: that of preparation—this should be deliberate; that of attack—this must be as swift as thought; that of recovery—this must be conscious. No matter to what point velocity may be carried, the mind must will and cognize these three different operations. When the fingers have all ascended and descended the scale, in the above exercise, let it be repeated as follows:



Here the attack of the first finger is unaccented, and the strong accent of the second finger is accomplished by a quick, tense pressure, combined with a flexing motion, which brings the finger-tip to the palm of the hand, as before. Neither form of this exercise is complete without the other, but practised in alternation and with different degrees of energy and speed, the two become the most valuable foundation for technical study. The principle of studying passage-playing by varying the rhythmic accent is technically most important. The most refractory run studied alternately in rhythms of three, four, six, and nine, becomes plastic and certain. Long rhythms are best for the purpose, because they promote greater smoothness. Scales, arpeggios, and figurated passages should be systematically studied in this way, and the result will be a fluent execution and a limpid tone.

V. ATTACK BY STROKE

By S. B. Mills

Rubinstein's Prophecy—Fundamental Methods of Attack—Stroke-playing—Production of Accented Tones—Legato Playing—The Full Tone—How to Acquire a Fine Tone.

RUBINSTEIN once said to me, "The newfangled notions of technique, by which legato and cantabile playing are sacrificed to the effort to obtain orchestral effects, will some day give place to the old ideas of Hummel and Moscheles." He lived to see his prophecy fulfilled. The technique of Paderewski, orchestral as it is in passages demanding such treatment, is grounded in the pure finger-motions taught by Czerny and Hummel. To their finger-work both Rubinstein and Paderewski owe the charm of their singing tone, their exquisite legato, and their superb treatment of all cantabile and polyphonic forms.

The idea of equalizing the touch of the five fingers is not very old. My father was for many years organist of Gloucester Cathedral, England. Dr. Crotch told him that, when Frouburger came from Germany and played Bach, every one was astonished at the peculiarity of his technique, and said, "He plays with his thumbs." After the new idea gained ground editors began to put a cross over the notes to be struck with the thumb. At first this member of the hand was pretty much confined to the white keys; now it is necessary to educate it to play black keys and white with equal facility, and with the same tone-quality as that possessed by the fingers. As a means of obtaining these conditions, no composer equals Bach. Bach is daily bread to the pianist.

There are three methods of evoking sound from the piano with the fingers, each useful in its place: (1) The key may be pressed downward by the muscular tension of the finger—this is attack by pressure; (2) it may be pushed downward by the weight of the arm —this is attack by weight; (3) it may be forced down by the velocity of the finger as it descends—this is attack by stroke.

This paper will be devoted to a description of the last method of attack, a form of motion which is the basis of all figurated passages, of legato scales, arpeggios, double thirds, and of the flowing cantabile style.

Attack by stroke is the germ of all fine concert playing, because it produces a tone at once brilliant, firm, and carrying. Properly used, this tone fills the concert-room, while other methods of attack lose in firmness or positiveness what they gain in other qualities. According to Henselt, the normal position of the hand is derived from the length of the fingers. Place your hand on the keys with the tip of the thumb turned slightly toward the palm, the tip of the little finger resting squarely on the key, not turned sidewise so that the side of the nail is in contact with the ivory. The other fingers should be curved so that the fleshy ball of the finger-tip (but not the nail) is in contact with the key. The ring finger should be more curved than the other fingers, to compensate for its weakness. Special attention should be paid to the knuckle-joints; they should never be depressed below the level of the wrist. The knuckle-joint of the little finger in particular must be educated to stand up firmly on its finger, so as to afford a good bearing for the finger in its stroke.

The wrist must not rise above the level of the knuckles; in close legato playing it may fall below it. Whenever the wrist rises above the plane of the knuckle-joints the weight of the hand and arm comes upon the fingers. The attack then degenerates into attack by weight, and the quality of the tone undergoes a change.

The finger should be prepared for stroke long in advance, and not raised at the moment of attack. The muscles which support the finger in the air should be relaxed at the moment when the opposite muscles bring the finger swiftly down on the key. This is practically impossible if the finger be jerked up exactly when it should be going down. The proper moment to prepare the finger for the stroke is that when it rises from the key whose note has expired. Thus, instead of two opposite and almost simultaneous motions in attack by stroke, there should be only one.

The fingers, however, must be raised to produce the accented tones, not jammed down with a pull from the wrist. The wrist must be perfectly loose, but also perfectly quiet, in stroke-playing by the finger. The higher the elevation of the finger at the moment of attack the stronger the blow and the louder will be the tone.

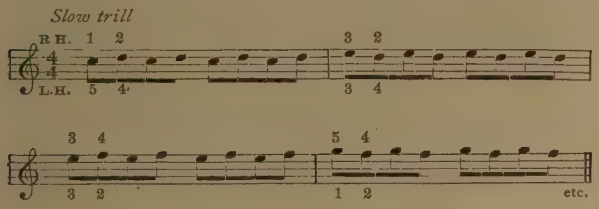
The school of piano-playing to which I adhere—which is also the school of Moscheles, Rubinstein, and Henselt—was much advanced by the greater deepness of touch and the enormous increase of tone resulting from the discoveries of Henry Steinway and his more famous son. This is the legato school, as opposed to the leggiero school of Tausig and Joseffy. My own conception of legato grew very much, in consequence of the great singing tone and the crescendo of tone, in response to pressure, offered by the piano I play. The touch of the pianist is more dependent upon the action and the peculiarities of tone of his instrument than people imagine.

In legato playing there must be a perfect connection between the tones of the successive notes. This is dependent on the firm pressure upon each key until the precise moment that the next tone begins to sound. In finger-playing the weight of the arm is divided between the shoulder which supports the elbow-joint and the playing finger which supports the hand and forearm. But the weight must always be on the finger

which has already struck, and never on the finger which is in the act of striking. In pure finger-staccato all the weight of the forearm is supported by the muscles of the elbow. The stroke itself is exactly the same as in legato.

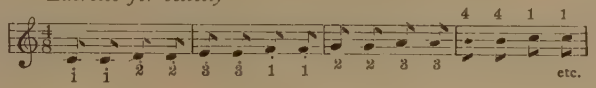
There is a good deal of tension in the finger while in contact with the key; the muscular pressure of the finger produces the full round tone so essential to a noble legato touch. This pressure is exerted by the nail-joint of the finger, and on the strength of this joint the fullness of the tone mainly depends. Its loudness results from the strength of the knuckle-joint, and its brilliancy and elasticity from the velocity of the finger in its descent on the key. It requires much more strength to play legato in pianissimo than it does to play forte, because the fingers must be prepared for stroke nearer the keys and the attack must be slower. The demand on the muscles is therefore much greater. Pianissimo practice is therefore very strengthening to the fingers; such a pianissimo as will carry, and sing; the opposite of that weak tone produced by a partial stroke.

The secret of acquiring a good tone, an equal touch, and great velocity, lies in very slow practice. Piano passages should always be studied forte, forte passages piano, to obtain security of touch. All passages may be reduced for purposes of study to a series of slow trills—i.e., a careful alternation of each note with the note that immediately follows it. When you can play every note in a piece correctly in groups of two notes at a time, then you may play the piece in groups of three and four, but every note should be studied separately with reference to its two next neighbors. Thus the slow trill is the basis of the execution of all music,

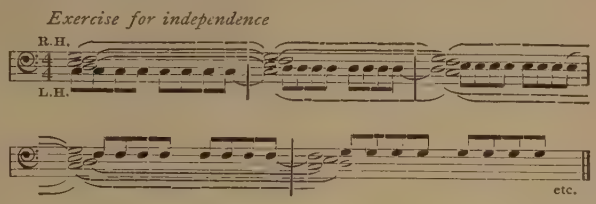
Slow trill

and is the first thing to practise. It should be studied with a careful ear to the perfect equality of loudness, and timbre of each tone and of each finger. Do not raise the finger too high, but make the attack as swiftly as possible.

When it is desirable to gain velocity of execution, the following variation is most helpful:

Exercise for velocity

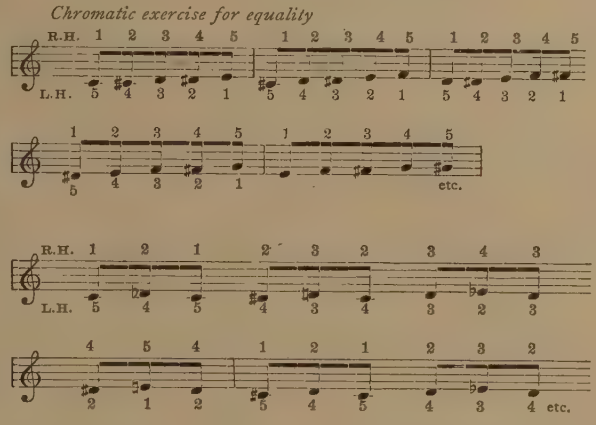


If the fingers are not free and independent the form should be altered thus:

Exercise for independence

holding all unoccupied fingers down, and with a loose wrist and arm. The arm should always be relaxed.

To obtain perfect equality on all keys, the following exercise is the most valuable that I know:

Chromatic exercise for equality



The ear should not be able to detect the stroke of the thumb by its sound, or any difference between white keys and black.

VI. HOW TO ACQUIRE A DELIGHTFUL TOUCH

By B. J. Lang

Difference in Players—Purpose of This Paper—Individual Qualities—Forty Daily Exercises and How to Play Them.

IT is universally admitted that no two persons produce exactly the same sounds from one and the same instrument; no two persons have quite the same touch; that is to say, the same music played in the same tempo by A and then by B will produce two differing results. The causes of this fact are both too numerous and too obvious to need mentioning.

My purpose in this paper is to aid you to develop as an important part of your technique the power to graduate and vary with freedom and ease the dynamic force of every tone you produce, whether that tone be one of many consecutively and swiftly played, one of a few quite slowly played, or one of few or many simultaneously played.

Be your characteristics of temperament, poetic sensibility, personal magnetism, imagination, etc., what they may, you must zealously cultivate such technical ability as will be serviceable in the more subtle expression of your art, as well as in the well-defined and practical. For the purpose of obtaining the power to graduate a series of tones, to color in divers ways everything which you play, and to produce the chiaroscuro in pianoforte-playing which is one of its ever-varying charms, I commend to your most industrious pursuit the following forty exercises, each of which should be played not less than one minute at a time, and invariably once a day, together with whatever you may otherwise play during a given month. Practise these exercises slowly, at the rate of one hundred notes a minute for one half the time, and as rapidly as you can the other half.

The graduation of tone should be constantly kept up; but the playing from day to day should vary from the most extreme "overlapping" legato to an extreme staccato, always holding to the one or the other for the whole sitting. You also should sometimes use an abrupt hammer-blow, and at others the most caressing pressure of the key that is possible. Each different method thus indicated should be separately pursued for one day at least. By carefully practising this series of exercises one month in each year, be your general method of playing reasonably good, I can safely promise that you will acquire (to such a degree as is physically possible with you) the means of producing such dynamic nuances in your piano-playing as your artistic nature may conceive.

If you would fully appreciate the importance of all this, try to play a few passages of unusual difficulty quite softly and without here and there missing a sound; the result of such an attempt would probably show that to execute a passage distinctly and clearly and with even force is one thing, while to play it with varying force is quite another. I doubt if any exercises, no matter what their special purpose may be, should be played without variation in quantity and quality of tone. The very name as well as nature of the instrument which we are trying to learn to use, and whose possibilities we hope to fathom, is "soft-loud." Every pianoforte performer of excellence has become what he is through persistent study of himself and of his instrument.

Physical force, speed, and endurance are qualities of great value, but they must be supplemented by every possible adjunct in the way of power of control. I am trying to excite your interest in a matter that means acquiring ability to control powers which we will presume you already possess to a reasonable degree. Give these simple exercises a fair trial and you will be rewarded for your pains. Invariably charge each set of eight strokes with as earnest a desire to increase or diminish in loudness the sounds produced as you would if those tones were the component parts of a beautiful musical phrase.

Although these exercises are written in E major, they should be practised also in C and B major, and in A flat, D flat, B flat major.

A very helpful companion to these exercises would be the practice of double thirds and sixths in the various major and minor keys, always playing either the lower or higher note of each third or sixth in each hand much louder than its mate. The first twenty exercises are for the right hand, the other twenty for the left.

RIGHT HAND

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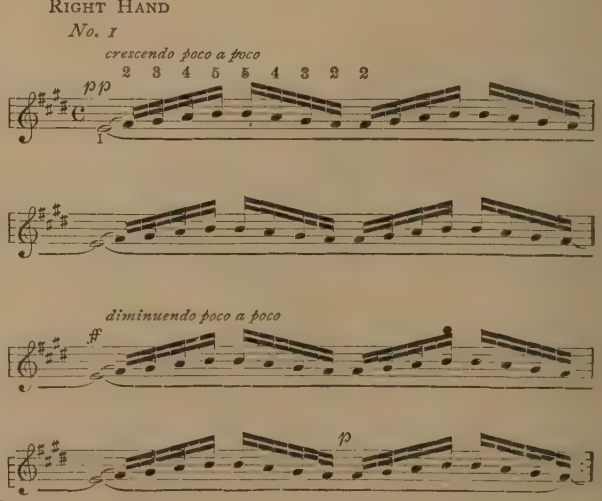

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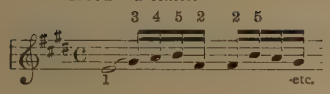

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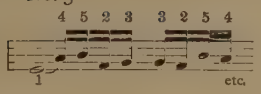

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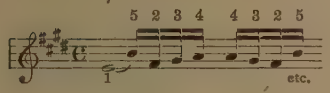

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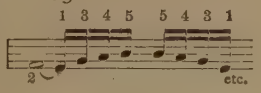

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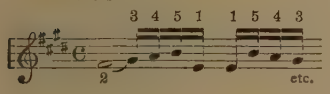

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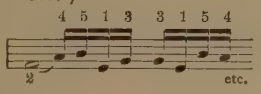

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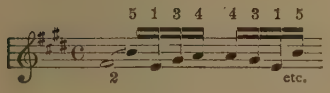

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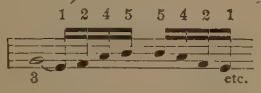

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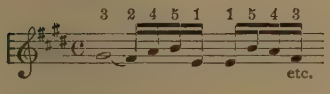

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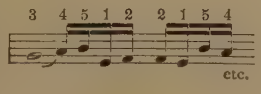

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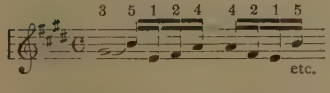

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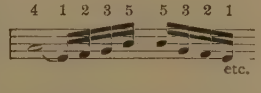

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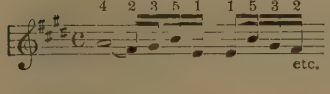

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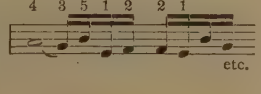

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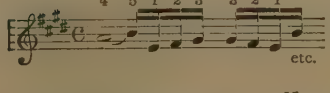

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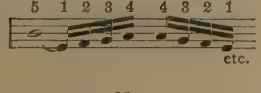

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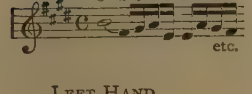

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LEFT HAND

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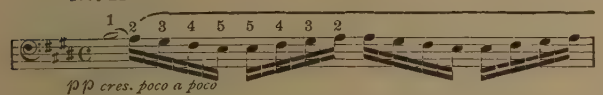

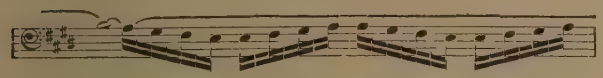

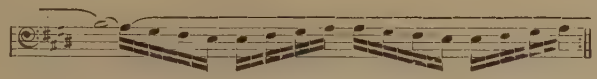

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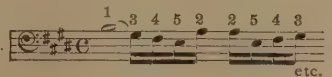

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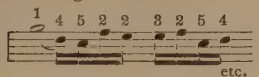
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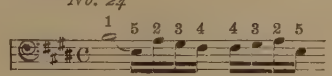

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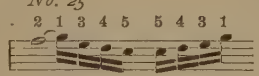
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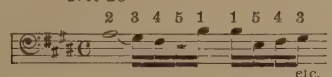

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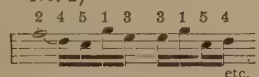

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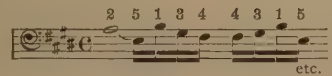

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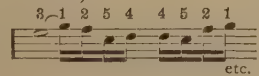
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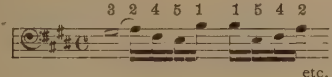

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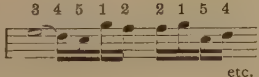

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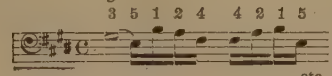

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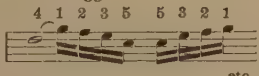

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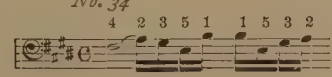

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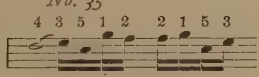

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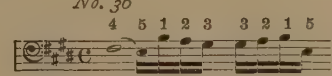

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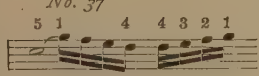

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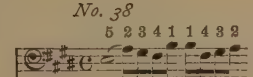

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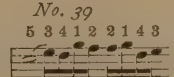

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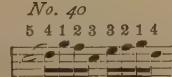


VII. HOW TO STUDY SCALES

By Fanny Morris Smith

A Perfect Scale—Difficulties in Scale-playing—Management of the Thumb—Exercises—How to Hold the Lifted Fingers—Rules to be Kept in Mind.

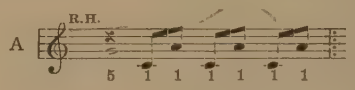
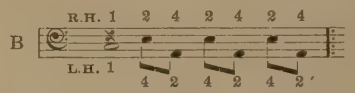
SCALE-PRACTICE is the beginning and end of pianoforte technique. A beautiful scale is a very rare property even of great piano-playing. A scale is a chain—a chain of notes—and therefore only as strong as its weakest link. There are usually at least two weak links in each octave.

De Pachmann has a remarkably fine scale, and so has D'Albert. These artists know the value of a relaxed shoulder and elbow. Any unnecessary contraction makes itself heard in the tone-quality of the different fingers. The stroke of the ring finger then becomes unduly weak, that of the middle finger harsh and dry. In a perfect scale all the notes are precisely alike, and the tone is full, round, and yet tender. Do you use a metronome? You do not need it for practice, except to determine the tempo. Begin at 80, not two notes to a tick, but two ticks to one note. "One to get ready, and two to go." When you are able to play presto, you may play eight notes to each tick.

There are three special difficulties to be overcome in playing a good scale on the piano: First, there must be no contraction of the wrist and arm, and the stroke of the fingers must be perpendicular. This belongs to legato playing in general. Legato means keeping one key down till the next note struck fairly begins to sound. Second, the motion of the arm in front of the keyboard must be continuous. Third, the thumb must be properly prepared for its stroke, properly controlled during its contact with the key, and properly released from this contact.

The thumb must be prepared for its stroke beneath the body of the hand by placing it under the ring finger as soon as the index finger has fairly struck its note. The thumb should glide over the surface of the keys to its place, and remain under the ring finger till its turn to strike comes. Just before the stroke the wrist rises perhaps a quarter of an inch, to give a little more room. When the thumb has struck, it rests on its key without pressure or tension, very limp, and its joints are turned like hinges by the motion of the arm, which pulls the hand over the thumb and brings the index finger in place over the note it is to play. When the index finger has struck, the thumb glides horizontally to its place under the ring finger. You must not let the fingers on either side the thumb lose their legato. If your elbow is contracted, they will lose it.

In the opposite case, where the thumb strikes after the index finger and the hand swings over the thumb, a limp, hingelike condition of the thumb-joints, immediately after the stroke, makes the motion of the body of the hand over the thumb very easy. The arm simply moves onward till the finger desired—the third or fourth finger—is over its key. The finger then strikes, and the thumb is drawn horizontally from under the hand to its place.

To obtain these motions it is necessary to crook the hand inward—i.e., make the ulnar bone the apex of the angle. This shortens the distance the thumb must travel to reach its place under the ring finger, and also the distance the fingers must travel when they pass over the thumb.

Exercise A will train the thumb to pass under the hand properly. Hold the G down with the fifth finger all the time.

Exercise B will train the hand to pass backward and forward over the thumb. Keep the thumb down on A, while the arm moves the hand back and forth in front of the keyboard so that the ring finger strikes below the thumb and the index finger above it.

Both exercises are written for the right hand. They should be reversed for the left.

When not actually pressing a key to obtain sound, each finger should be held up half an inch above the keyboard. The fingers should be raised from the keys without contracting the nail-joint. The arm should preserve a straight horizontal line from the knuckles to the lower point of the elbow.

The following rules should be kept in mind:

1. Correct position of the arm.
2. Muscles of the shoulder, elbow, and wrist must be relaxed.
3. Fingers not in use must be kept raised in the air.
4. No finger may quit its key till another has struck.
5. Lift the fingers perpendicularly.
6. Keep the wrist crooked.
7. Move the forearm horizontally before the keyboard.
8. Keep the thumb in its place prepared for its stroke.
9. Relax fingers and thumbs after striking.
10. Turn the nail-joint of the thumb toward the hand.

Now put away the metronome, and count "one and, two and, three and, four and." Prepare each finger as you say "and," and strike it when you speak a number. Accent the count of "one." This brings the motion into common time.

VIII. RECIPROCAL FINGER ACTION

By Edward Morris Bowman

Up Motions and Down Motions—Bad Results of Careless Up Motions—Normal Touch—Advantages of Quick Motion—Preliminary Exercises for Quick Motions.

COMPARATIVELY few teachers and students of piano-playing properly estimate the importance of quick, correctly timed, reciprocal motions of the fingers. To the average student the down motions represent necessary forethought, up motions non-essential afterthought; down motions produce tone, up motions signify nothing.

The truth is, up motions are the exact reciprocals of down motions; the one must equal and counterbalance the other. This reciprocity is of vital importance. Both motions, therefore, should be consciously foreseen and consciously directed until the habit of perfect reciprocal action has been formed and firmly established. Clearness, fluency, and general control of the fingers depend upon this reciprocal action much more than is commonly supposed. Take as an illustration the trill. How few players are able to trill rapidly and evenly! Pianists wonder why they execute this embellishment so badly, when their scales and passage-playing seem to pass muster. Why is it? Watch the rising finger, and you will observe that it starts and moves more sluggishly than its falling fellow. Its motion is not the perfect reciprocal of the striking finger. The training of the nerves and muscles controlling the up motion has been neglected, and, as a consequence, it is utterly impossible to trill rapidly and evenly. Any inequality in the control of the two motions will inevitably produce inequality in the trill. It should be observed that not even the down motions of the average student are as quick as they should be to insure the highest artistic results. Moreover, the tempo of the trill will be governed by the slower of the two motions.

For the same reason, how rarely do we hear a superior scale! The down and up motions are not perfectly reciprocal. The down motion may be quick enough, but it is probable that the up motions are neither quick enough nor accurately timed. Thus the fingers linger on the keys too long, or not long enough, and the result, in the first case, is a slovenly overlapping of the tones, or, in the second, a detaching thereof as though punched out with a die. The lingering pressure is a desirable touch when artistically controlled, but, according to my experience, it is dangerous to employ this touch prior to the mastery of the other as a more fundamental movement.

The touch which should be taught to the beginner at first is that which afterward is to become the normal habit of the hand, and from which every deviation—clinging, lingering, pressing, caressing, driving, detaching, etc.—is to be made. This consists of a vertical down and up motion as quick as possible of the finger, which swings loosely from a very slightly elevated knuckle-joint, and attacks the key with the tip of the vertically poised nail-joint.

Pliant conditions, of course, must prevail in every muscle of finger, hand, arm, and body. There must be no supertension anywhere, either in the muscles directly employed or in those that show a tendency to act in sympathy. From this touch once established every modification may be studied and used with safety.

The advantage of a quick action of the finger is that it secures the best result in tone, power, and speed with the smallest outlay of effort. The reasons for this are apparent: (1) Good quality of tone is secured, because the extreme degree or climax of finger flexion is maintained during the shortest possible time, thereby reducing to the minimum the danger of a hard tone and the obstacle of a flexed hand; (2) power may be secured by quick, elastic movements or by those that are slow and ponderous: the former are best, because the momentum in a quick stroke reduces the degree of muscular force necessary to accomplish the desired result; (3) speed is secured, because pliant, elastic, unrestricted conditions prevail in the hand, and because the fingers, having been trained to quick individual movements, are properly prepared for quick movements in groups. In playing a whole note, for example, the finger that has been correctly trained goes down to the key and is retracted from it with precisely the same speed with which it plays one of a group of sixty-fourth notes. The only difference, then, in the playing of whole notes and sixty-fourth notes is the length of time that the finger remains on the key.

We may lay down this as an axiom: The quicker the stroke the greater the probability of pliancy in the touch; the greater the pliancy of the touch the more musical the tone. The student will do well to make use of the following preliminary exercises for quick motions.

I. Take your seat at a technic table or a stand of such a height that when you place your hand on it, in position ready to play, the upper side of the forearm from the elbow-joint to the metacarpal joints will decline very slightly. Position taken and finger-tips resting lightly on the table, (1) lift the index finger (the most easily controlled) as slowly as possible to its highest point, keeping it curved, (2) poise it a moment there, (3) let it fall as slowly as it was lifted. See that there is no stiffness or superflexion in any muscle from hip to finger-tip.

II. Set your metronome going at sixty, count four in a measure, and at "four" raise index finger as quickly as possible. Poise the finger perfectly still until you reach "four" of the next measure, at which instant it is to fall with the utmost celerity. Repeat several times.

The motion should be so quick that the outline of the finger cannot be seen during its passage. The conditions of rest and action here are analogous to the discharge of a ball from a cannon. The ball in the cannon is in a state of rest. The powder behind it is ignited, the explosion follows, and the ball starts at full speed on its course. There is at one instant passivity, at the next, activity, and all the time a certain kind of freedom. In this touch the flexion of muscle, like the explosion of the powder, should be for an instant only, and the missile be then allowed to fly to its mark untrammeled.

III. Count three in a measure and quickly lift the finger at "three"; poise it until the next "three" and cause it to descend as quickly. Repeat several times. Then count two and move at "two." Lastly, move at each count.

IV. Now practise the same series, but alternating the fingers, 1, 2, then 2, 3, and so on, putting each pair through the series above described before proceeding to the next pair.

After a few days' practice on the table—exercise that may to great advantage be drawn out to one or two weeks, according to need—the student may go to the piano, or, far better, to the practice-clavier, and begin with the third exercise. We have in these exercises the beginning of the trill as well as of all other kinds of two-finger exercises, and are thus just across the threshold of a course of study that should end only with the pianist's career itself.

IX. THE ART OF POLYPHONIC PLAYING

By Bernard Boekelman

The Singing Tone—Two Fundamental Touches, Instrumental and Vocal—How to Prolong Vibration—How to Acquire the "Bach" Pressure—Hearing the Parts Separately—Pressure and Expression—Modulatory Changes—Pedal-playing.

OF all varieties of piano technique none is more difficult to acquire than the art of rendering several distinct voice parts simultaneously, known as polyphony. Its most vital factor is a musical and soulful tone, and to acquire this demands in the player more than ordinary mechanical skill. To the superficial critic the piano possesses but little singing power; to the modern piano-player and virtuoso it is a copy of the orchestra. With Thalberg the last "singer" of the piano left the musical stage. He himself tells us that for five consecutive years he studied singing with one of the foremost Italian vocal teachers. Certainly his "L'Art du chant" is a monumental bequest. But, although this work contains many points valuable to the student, it lacks pedagogic experience, and is not based on science. The hints given are but notes of the writer's own practice. What may be the qualities of the instrument, and what should the student do to evoke them, are questions which remain unanswered to both teacher and scholar.

All varieties of touch may be reduced to two fundamentals, namely, the instrumental and the vocal touch, the acquisition of both of which is essential to true artistic playing. The latter is by far the most difficult to acquire. A power of artistic hearing, a knowledge of the laws of the contraction and extension of the muscles, a knowledge of the hammer-construction, and the ability to keep up a continuous free vibration of the strings by means of a soft pressure on the keys (not striking or toying with them), and, finally, an artistic use of the pedals, are the principal requirements. It may not be generally known why the sound produced by means of a stroke by the finger has a different effect upon the ear from the vocal sound evoked by means of pressure—i.e., the touch of the key-surface by the finger before the tone is produced. If, for example, one or more tones be produced by means of pressure, and instantly afterward kept up by a constant elastic tension of the respective muscles of the fingers, wrist, and forearm, the vibration of the strings is renewed by the alternate contraction and extension of the muscles themselves. The air which surrounds the strings is set anew into vibration by the pulsation of the muscles, apparent in the delicate movement of the hammer. This renders the quality full and sympathetic, not only on account of the simultaneous sounding of the overtones, but also because the constant vibration of the muscles of the fingers, wrist, and forearm is imparted to the hammer. If the hammer is too stiff in the axis, it will remain stationary without altering the clang-tint, and the strings will give no response to the muscular pulsations. If the hammer is elastic in the axis, it will respond to the will of the player, and the impulse from these renewed vibrations will give the desired singing tone. The value of pressure extends to chord-playing also. All concert players know that full chords *grasped out* of the keyboard sound far more full and noble in a hall than when struck with full power *upon* the keys. Was there ever a greater giant than Rubinstein in this respect?

This vocal touch is inseparable from fine polyphonic

playing. Its study should begin earlier than is usual. The mere playing of Bach's preludes and inventions in a Czerny style will never result in this true and artistic mode of playing. Our aural nerves should be taught to perceive each tone during its full metrical length. Single notes of a long duration played in the following manner will lead gradually to a perfect singing tone. The requirements are: (1) An elastic tension of the cords and muscles of the fingers, hand, and forearm; (2) the use of the finger-ball (not finger-tip); (3) a well-developed wrist, held rather high; (4) an energetic pressure by the forearm. (This last must be gained by keeping the mind on the vibration of the muscles, and should be first acquired away from the keyboard.) Without this mechanical action nothing is obtained by further developing this technique.

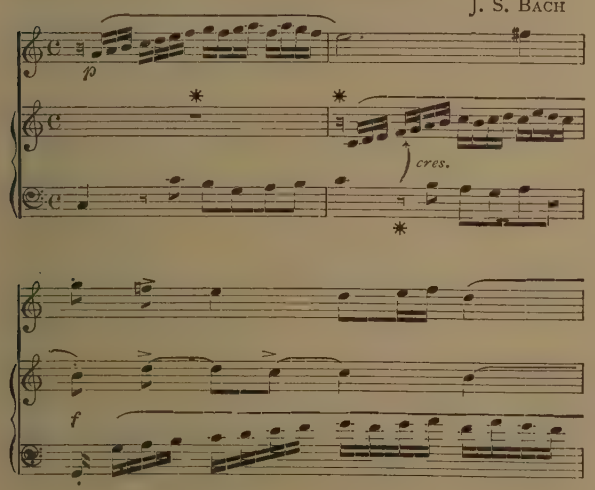
After becoming conscious of the inner invisible strain of the muscles (like the pulling of a rubber band) by focusing the will-power on the muscles of the playing fingers, it is advisable to return to the keyboard. The student will then find the further development of his singing tone in his own will-power. The second and perhaps the most important part of the production of the singing tone is the habit of listening attentively to the duration of the sound, and of preventing its vanishing away. At first, give no limit to time; try to hold on to the sound through the medium of your auditory nerves. It is a wearing but well-paying process. Next to it comes the power of hearing in combination with rhythm. The ability to regulate this tonal excitation metrically is the last preparatory step to the beginning of the proper polyphonic playing.

All these studies should be made on black as well as on white keys, on account of their difference in size.

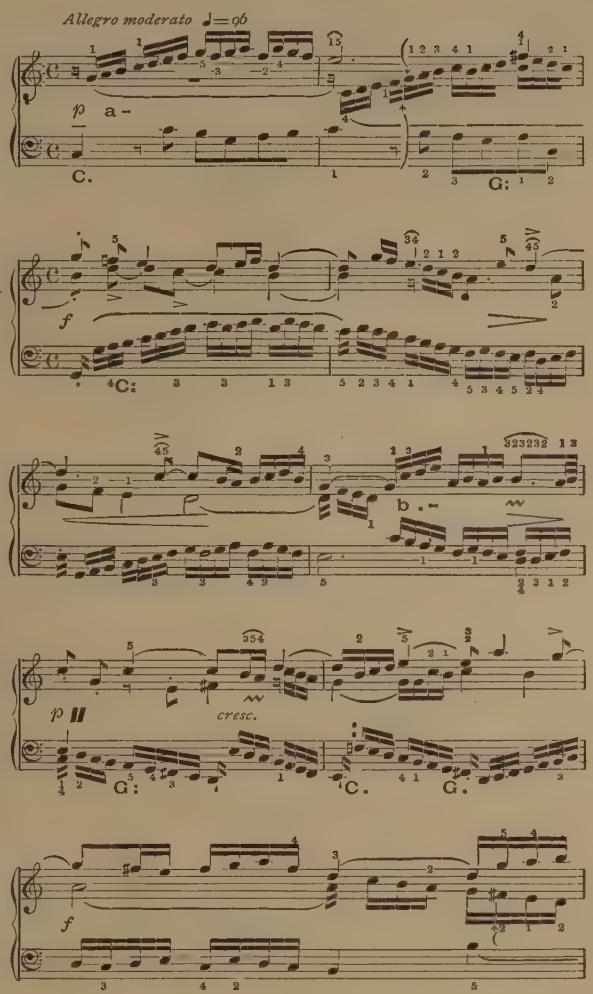
In polyphonic playing all the voices are independent, but all take part equally and form a harmony of melodies. Our manner of writing for keyed instruments is simply a contraction from the score, and our best writers always make the voices clearly, rhythmically complete. The different parts in a well-written composition are defined by the direction of the note-stems, as illustrated in Example II.

Ex. I. Each part has its own staff.

J. S. Bach

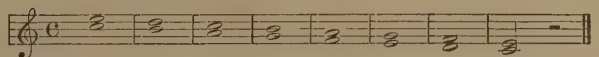


Ex. II. Reduced to one system.

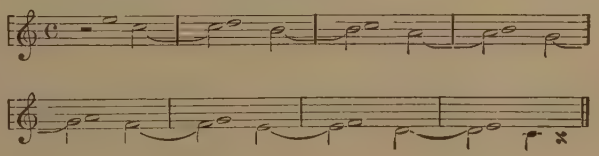


These examples may assist the student to read polyphonic music. Play the parts separately until the eye becomes familiar with them. To acquire this mode of playing, begin with the simplest form:

I. Two-voiced:



Listen to both voices in unison, cut the hearing in two, and be conscious of keeping each entire tone in vibration until the next begins to sound (the easiest and safest road to a perfect legato).

II. The same, divided equally:

Here arises a difficulty which requires all the student's will-power—i.e., to hear the parts separately and jointly. With the entrance of the lower voice we are inclined to drop the upper voice not alone out of sight but even out of hearing. This obstacle must be overcome by patience on the part of the player. It must be removed by accurate hearing and by leaving the faculty of sight entirely out of use. When beginning, learn first to hear the lower voice and secondly the upper.

Should this still prove too difficult, each of the voices may be given separately to one hand, then, if properly rendered, both simultaneously to the same hand. A transposition to D flat and D is urgently recommended, and should, of course, be practised by each hand separately. Rieman's little work, "Technical Preparatory Studies for Polyphonic Playing," may now be successfully studied, beginning with the simplest forms of two voices played by one hand (page 33, right hand, and page 35, left hand). It cannot be too often repeated, that the greatest pains must be taken (1) not to let the eye dominate over the ear, and (2) to keep the strings vibrating their entire prescribed duration.

The student may ask if all this will ultimately pay. I answer: "If your intention is to express your feelings musically, learn to press these feelings out of the keys; study the principles of pressure, and awaken the electric current between yourself and your listener. Will not this pay?"

Another not less important factor in polyphonic playing is the reading of the parts both vocally and harmonically at the same time. Of course, this is hardly possible without knowledge of elementary harmony and knowledge of proper part-writing. Nevertheless, much can be accomplished if the modulatory changes in the root-forms of the harmony are looked up. The student who is able to recognize the scales and chords can easily locate himself. Take, for instance, a piece written in the key of C: if the first accidental met with is F sharp, the modulation leads to G major, but if D sharp is also given, then to E minor. All that needs to be known is that sharps always enter on the seventh tone of the new scale, consequently the next note is the tonic tone; when modulating with flats, the fourth note of the new scale has the new flat. In minor, the third is minor. This is too practical not to be understood by pupils of ordinary thinking capacity. Constant practice in it will clothe the song parts upon their harmonic skeleton.

The artistic rendering of a polyphonic composition will always be more or less characteristic. The endless varieties of possible vocal and instrumental effects will give both student and accomplished artist plenty of room for individuality and originality. The road to originality is the power gained by familiarity with the rules of esthetics, anatomy, and natural feeling. Tone-coloring by means of the pedal is the final element of beauty in polyphonic playing. Hans Schmitt's little book on this subject contains all needful information. Living examples of beautiful pedaling, like Paderewski's, may be imitated, but pedal effects, like varnish, should only be applied after the picture is finished.

The pressure-touch, formerly and principally used by the master on the clavichord, is the only link left between this instrument and the modern pianoforte; and it seems quite credible, in view of the beautiful expression which was given to the clavichord music, that the listener was often moved by it to tears.

X. THE TEACHING OF RAFAEL JOSEFFY

From the Notebook of Mrs. Henry T. Finck

Much Study Required—Legato and Staccato Practice—Two-finger Exercises—Slow and Fast Practice—Development of the Wrist—Trills—Joseffy's Patience and Care—What His Pupils Study.

TO hear Mr. Joseffy enumerate the necessary qualities of a pianist, and the amount of study it takes to accomplish anything, makes one feel that life is short indeed and art is long. And yet he is a teacher who fills his pupils with enthusiasm and a desire to work, in spite of his great demands on their strength and endurance. He hurries them through an immense amount of music in a year, as he thinks this is the broadest and quickest way to learn. He says: "Everything you study helps everything else, especially when you study great things. However, it isn't good to study one thing too long, for when you are no longer able to advance you necessarily lose." His pupils are required to memorize everything they play. For training the memory he especially favors Bach. In learning a new piece we begin to memorize it at once, committing a few measures every day, for, as he says, "one never knows a thing until it is memorized"; and he calls playing from notes "reading."

He studies his own hand very carefully, and con-

tinually discovers new ways of overcoming technical difficulties, which he shows his class after he has made sure of their efficacy. While such exercises look very easy, when we try to imitate them, it takes very careful analysis to understand them. For instance, perfect legato is made comparatively easy by practising both legato and staccato (wrist, not finger) successively, and then, as it were, combining them. When Tausig first used this pure legato all his critics accused him of playing staccato, for they were accustomed to the Moscheles school of legato portamento. The legato-staccato practice is particularly valuable for the weak fingers of the hand, which so often cling to a note after they should have left it. It also prepares the hand for rapid staccato. The first note in every group of four in Schumann's second novelette is marked staccato, to keep the player from clinging with the thumb. This is only one of many instances in Schumann.

Mr. Joseffy says everything should be practised legato and staccato; very slowly and fortissimo, with the fingers raised as high as possible; occasionally very fast—what he calls a "big tempo"—which acts as a forcing process; in all keys; right-hand passages, when difficult, with the left hand, and vice versa; with different accents, rhythms, and touches; and with the fingers between the black keys. This last is very difficult. It is used to obtain precision, but it must not be done too much, as it is liable to weaken the stroke.

"Two-finger exercises," practised in these different ways, are, in Mr. Joseffy's estimation, the foundation of piano technique, the most important of all exercises, unless he should except the first number in H. Schmitt's Daily Studies, Op. 4—holding a chord in all the different positions and in all keys, then raising and striking with the fingers one after another. Two-finger exercises, scales, arpeggios, scales in thirds, and such passage-work, must always be practised to a certain extent in contrary motion, as thus the fingers may be more easily watched and corrected. He tells his pupils that, in practising an hour on scales in contrary motion, it is more beneficial to practise thirty minutes always starting with the thumbs, and the other thirty beginning with the fifth fingers, than to devote the whole hour to playing the complete scale each time.

Another important point is, always to practise something more difficult than the special bit of technique one is working for: for instance, if one is studying octaves, ninths should be practised; with chords always bigger ones than those demanded, and in all keys. Mr. Joseffy considers the transposition of exercises a necessity. The wrist must be loose under all circumstances.

He continually impresses the necessity of slow practice on his pupils. To one of them he said: "Play six days slowly, the seventh fast. This is recreation." It is doubtless an excellent motto for all students, but it is not the only way; he also says, "You must not only practise fast things slowly but slow things fast," as this gives great mastery and repose.

Mr. Joseffy's use of different rhythms prepares the hand for both slow and rapid work, as both are used in the same exercise.

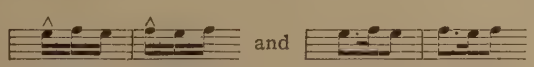
or

Clementi's "Gradus" may all be studied rhythmically in this way; but if this method is used before the notes are well learned, it will make the hand unsteady.

Mr. Joseffy believes in the use of light dumb-bells to prepare and strengthen the wrist for octaves. Octaves should be practised with the first and fifth, the first and fourth, the first and third fingers, and, by hands that can stand it, the second and fifth fingers. Much can be done toward the latter fingering by stretching exercises at the piano. Chords (usually much neglected, although they are more difficult than octaves) should be practised in the same way, with a very loose wrist.

In long jumps the hand and arm should be turned in an arc from the elbow. It is far better to make a bold, daring jump in this way and miss, than to be too careful and strike the right note. Even Rubinstein was not sure in a jump. Mr. Joseffy says it is a special gift, as much as a natural wrist motion or an even trill.

In practising trills, it is best to hold down one or more notes to steady and give balance to the hand. Long trills should be studied in this way, but if they alone are studied the hand will be quite unprepared for short ones, so part of the practice-time should be given to short trills of three notes, playing with varying accents and rhythms. To make the work more difficult, it



is better to practise trills in semitones, first and third fingers with the thumb on the black key, second and third with the third on the black key, third and fourth like second and third, and fourth and fifth in both ways. Trills with the thumb and second, and the third and fourth, are the hardest and need the most work.

It is interesting to watch Mr. Joseffy's patience and extreme care in teaching. He never overlooks the slightest mistake in fingering, touch, or technique, no matter how trivial it may seem. He can *hear* wrong fingering in a rapid passage, and one day he gave us a proof of it. One of his pupils was playing, and as he had his back to her and was walking away from the piano he certainly could not see, but he corrected her, and told her to use the third, not the fourth, finger in a certain rapid run.

His pupils study a judicious mixture of Clementi's "Gradus" (Tausig arrangement), Czerny for technique, Liszt for brilliancy and effect, Chopin for delicacy, precision, elegance of style and romantic feeling, Bach for thoroughness and depth (musikalische Solidität), and Schumann for accuracy in rhythm and accent. In a general way this gives an idea of Mr. Joseffy's method, but it should not give the impression that his teaching is limited to these few composers. He freely uses all good studies and pieces. Many are the beautiful things one hears in his class, by great composers like Jensen and Henselt, which are rarely played in our concert-halls.

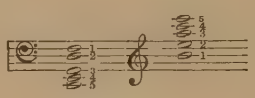
XI. HOW TO STIMULATE THOUGHT AND IMAGINATION

By Richard Hoffman

Overdone Technical Study—Capacity of Hands—Art of Interpretation—Time and Rhythm—Comparative Scales—Modulations—Pupils Should Hear Much Singing, Opera, etc.

SO much of the individuality of the teacher must enter into his musical instruction to others that it is difficult for him to see himself as others see him and to describe with any accuracy the way in which he achieves his results. While I do not undervalue the necessity of technical studies, it has always seemed to me that undue attention is being given to them, often to the exclusion of the higher education in music. Of course, the fingers must be trained by a course of technique full of unaccustomed difficulties, which finally leaves us free to think of higher things. But evenness of tone and of touch are not everything—in fact, nothing *per se*—for we can combine both in the mechanical pianos and organs so much in vogue at the present time. When an artistic player is heard, it is the variety of tone, the infinite shading, expression, and feeling which charm and uplift us. And these are not all the result of technical study. He must have gone deeper than this; and although it is wisely said that poets and artists are born, not made, I think it possible to awaken the faculties of appreciation, which, added to perseverance and zeal, produce a disciple not unworthy of the master.

A technical stumbling-block to advanced pupils arises from the fact that most of the great modern composers for the pianoforte had very large hands. Henselt, Chopin, and Rubinstein have all written études which are simply impossible for small hands, and I give below the position in which Henselt is said to have placed his fingers upon the keyboard, keeping them there while he read a book held open upon the music-desk.

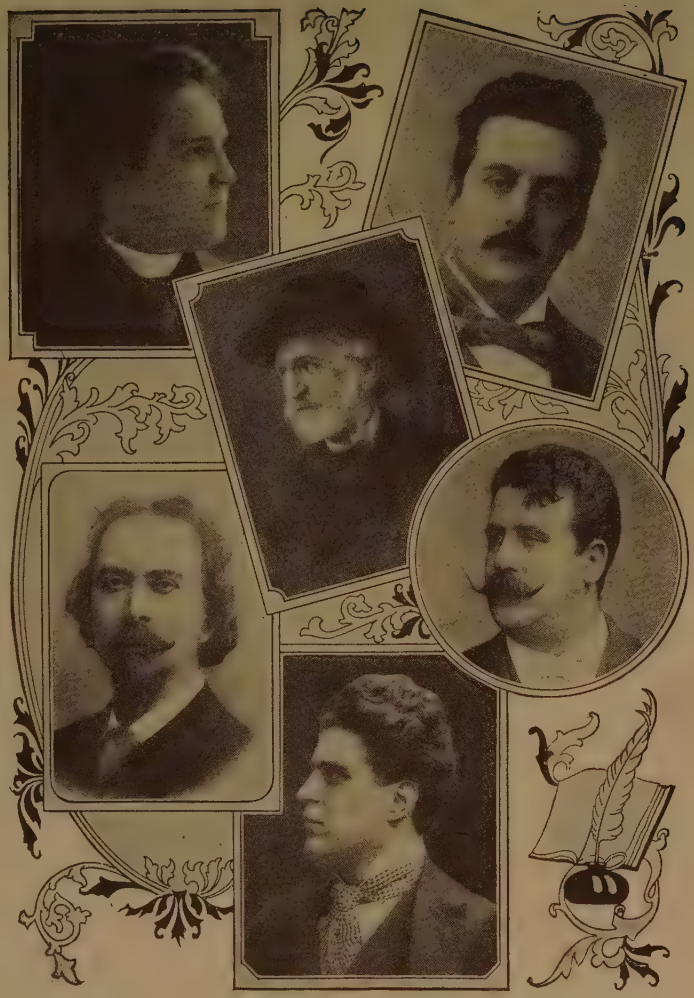


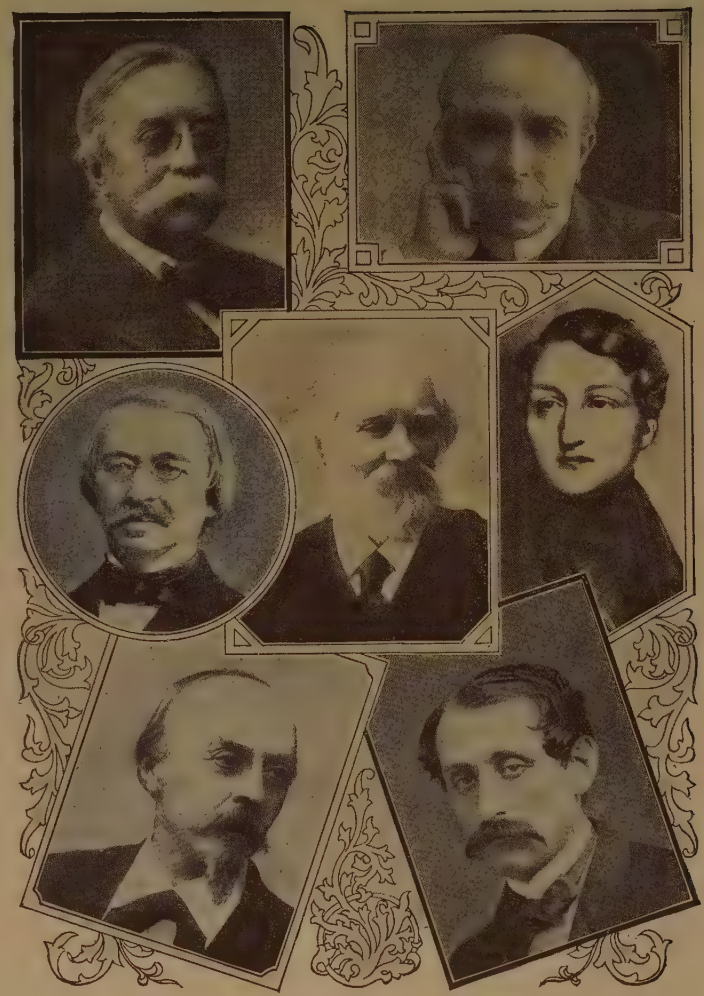
Hands capable of maintaining this position could play his Etude No. 5, Op. 2, Book I, or Chopin's Etude No. 8, Op. 25, Book II, with comparative ease. Different methods must of necessity be adopted to increase the extension of the fingers. Some pupils have hands so pliable that they can bend the fingers back until they touch the arm; others, again, cannot bend them at all. The average extension of a woman's hand is a ninth, a tenth being rarely reached on the white keys.

It is a familiar experience to find the appetite of the pupil for some coveted piece bringing him safely through difficulties apparently insurmountable. For this reason I put the art of interpretation before overmuch technical study. The passion for playing will stimulate the technique of the pupil, and create resources by its own desire. Reflection and comparison furnish food for imagination. I try to induce my pupils to make an analysis of whatever they may be studying, and also to stimulate research, by asking questions like the following: "Why is it that the great composers, in depicting a storm, have invariably chosen the minor key?—Rossini in the 'Overture to William Tell,' Beethoven in the 'Pastoral' symphony, Spohr in his 'Power of Sound,' Wagner in his 'Walküre' prelude." Also, "Why should the chord of the diminished seventh be always used when the devil appears upon the scene?—Weber in 'Der Freischütz' (Caspar), Gounod in his 'Faust,' and Wagner in his 'Overture to Faust,'" to mention a few instances. Again, I ask them, "Have you noticed that Hungarian airs commence on the down beat, or first of the bar, Wagner's later melodies and subjects doing the same?"

In pursuance of this system, if a pupil were studying Beethoven's sonata in A flat, I should desire to find out his conception of the movement following the funeral march written on the death of a hero. I should ask, "What moved him to introduce this light and almost frivolous theme so close upon the footsteps of the mourners?" In many instances the pupil might be young and happy enough not to have thought out such a problem, but the more experienced mind, and one to whom music has many things to say, will see that Beethoven only depicts the giddy world which goes on amusing itself in an unceasing whirl of gaiety in spite of death and even irreparable loss. In the concluding movement of the Chopin sonata containing the funeral march there is much to be thought out and studied; but only the most advanced pupils would be capable of giving it any meaning, and only *one* player that I have heard has succeeded in giving an absolutely perfect rendering of what must be the whistling wind sweeping the hurrying clouds before the face of the moon, and lashing the trees in relentless fury, then moaning itself away like a restless spirit.

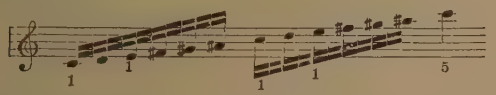
Questions would naturally arise suggested by the work in hand, and some of those connected with time and rhythm might not be out of place here—such as: "Where does the accent fall in the waltz—that is, on which part of the measure? Where, in the mazurka? polka?" Again, "Why are so many compositions written in $\frac{3}{4}$ time and called waltzes found to be impossible as dance music?" If the pupil can tell me that the *spirit* of the waltz with the sentiments and feelings which it inspires in the dancers is as much a part of the composition as the dancing motif, it is safe to believe that the Chopin waltzes and mazurkas will receive an intelligent interpretation.

A favorite theoretical question of mine is, "Don't you think the ear could be made to accept, and even

LORENZO PEROSI
GIOVANNI SGAMBATI
GIUSEPPE VERDI
PIETRO MASCAGNI
GIACOMO PUCCINI
RUGGIERO LEONCAVALLO



WILLIAM MASON
THEODOR KULLAK
THEODOR LESCHETIZKY
HANS VON BÜLOW
ISIDOR PHILIPP
SIGISMUND THALBERG
LOUIS M. GOTTSCHALK

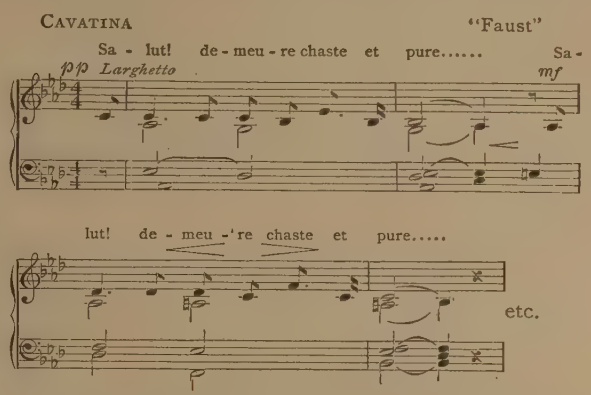
like, a scale all the intervals of which are whole steps—thus:

instead of the diatonic scale, where the interval from the third to the fourth and the seventh to the eighth is a half step?" The invariable answer is, "No." "Now play it fast, fingering it as marked."

This pleases better. "Yes, I rather like it." This leads to an explanation of the construction of the Scotch and even the Chinese scales, perhaps branching into a description of the Gregorian tones. One can pursue the subject as far back as the old modes of the ancient Greeks with their quarter tones or steps, although we are daily getting farther and farther away from these delicate distinctions. Good violinists have told me that they no longer make any difference in stopping the G sharp and A flat, C sharp and D flat, and the other enharmonic intervals, and one cannot but feel that these finer subdivisions will soon become lost to art. Everything that can interest or stimulate the curiosity of a pupil or tend toward enlarging the scope of his musical ideas is valuable, and while the fingers are resting, the head may work with those finer tools, which together produce an intelligent and finished result.

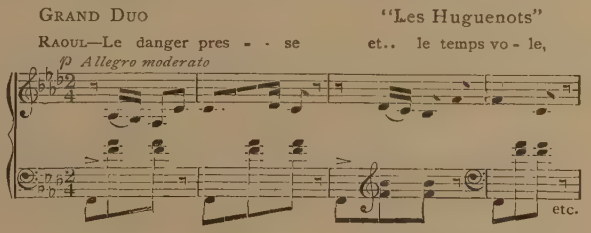
Another interesting but more intricate study would be following the different modulations of a composition, for instance: Chopin's nocturne in G major, Op. 37, No. 2, or the first movement of Beethoven's sonata, Op. 53.

I advise my pupils to hear as much good singing and as many operas as possible. The ear cannot be better trained than by this means. To hear such an artist as Jean de Reszke phrase and enunciate in the "Salut!" cavatina of the garden scene in Gounod's "Faust," or to be able to recall one's impressions on hearing, and I may add seeing, Nilsson and Campanini in the duo of the fourth act of the "Huguenots," with all its conflicting emotions of love, honor, and despair, is an education in itself. I know that it has influenced my own powers of interpretation, and I look back upon the seventy or more operas that I have heard, with frequent repetitions, in my lifetime, as being one of the sources from which I have drawn my musical education.

I include in this advice all good orchestral concerts where standard works are played, leading my pupils to mark that in all the classical compositions every note is audible and is given to the right instrument—fewer instruments producing by this means as grand an effect as double the number in a more modern work, where a host of players are uselessly spending their strength upon passages which are entirely overpowered by the heavier brass of the present-day orchestra. All this



head-knowledge will be sure to come out at the finger-ends. Those great pianists who can charm their hearers by their interpretations can be quickly counted, while those who excel in digital dexterity alone are as innumerable as the stars of the firmament.



XII. THE PROPER EMPLOYMENT OF THE EAR IN PIANO-PLAYING

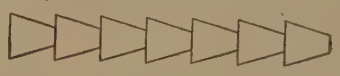
By Constantin von Sternberg

Dynamic Element in Melody—The Pianist's One Dimension—Supreme Importance of the Ear—Illustration from Chopin—Practical Suggestions—Promised Results.

IT has often occurred to me that students of stringed and wind instruments have a great advantage over piano students in the fact that they have no guide for either their intonation or their technique, except their own ear. In giving quality to a tone, in fact while producing a tone, they have to inquire of their ear as to the exactness of the pitch; while the pianist, when noticing an impure tone (something of which some students grow shockingly unmindful), simply sends for the tuner. This lesser dependence of the pianist upon his ear has proved to be very conducive to a neglect of that control which the ear alone can exercise, and thus it comes about that many piano-players do not hear anything more in a melody than the rise and fall of intervals, and the rhythm. The dynamic element is lost sight of; yet it is this very element which most directly appeals to the emotional faculties of the listener, to whom intervals and rhythm are only intellectual concepts. I repeat it, the dynamic element in music is the one which alone addresses our inner life, our emotional faculties; if beautiful harmonies, melodic intervals, interesting rhythms are to affect more than our mere intelligence, if they are to penetrate into the innermost sanctuary of our feelings, they must be introduced by the dynamic element. A melody played or sung in one monotonous degree of force has no effect upon us beyond awakening a transient interest in its intervals, which is a purely intellectual occupation—in fact, only a matter of observation, if not of mere curiosity. Hence, if it is true that the human voice is the most appealing musical instrument, it must be for the reason that the human voice, in its natural condition, is compelled to make dynamic changes corresponding to the rise and descent of intervals.

Having thus indicated, as far as the limited scope of this article permits, the importance of the dynamic element to musicians in general, I turn to the pianist in particular. To other musicians there exist three dimensions of dynamics, namely, the crescendo: ; the steady tone in any degree: ; and the decrescendo: . The pianist has, strictly speaking, but one dimension at his command: the decrescendo, because that is the only form of tone he can in reality produce. All the other forms he must substitute by artistic deception; he must be an illusionist, as far as the first two of the aforesaid dimensions are concerned. Fortunately, the modern piano offers an almost unlimited number of means to produce this deception, and most piano-players realize this; but of the one form of tone which is legitimately its own many players are totally unmindful, because they have to remember so much about tendons and flexors, wrist action, hand position, technique, and what not, that they fail to employ that organ which is of supreme importance in music, the ear!

A rapid succession of tones on the piano, graphically demonstrated, would look like this:



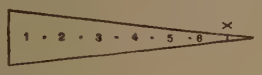
(As I deal with melody, legato is presupposed.)

The sustaining power of the piano is so well developed nowadays, that such a rapid succession, to the human ear, seems to possess a uniform degree of strength. But when the notes of a melody vary in length the matter is very different, for then the pianist has to consider (or rather to feel) the importance of every note as to the musical sense of his melody, and if a long climacteric tone has been reached, the anticlimacteric one should not follow without due consideration as to *how much the preceding tone has already lost of its primary force.*

This must not be grotesquely construed to mean that every piece should constitute one long and continuous diminuendo. By no means. The accent due to the principal pulse-beats ever furnishes new material for the replenishment of force. Nevertheless, I maintain that the diminuendo is the only form of tone the pianist has actually at his command; that it is the handiest word in his vocabulary, and that therefore he ought to pay the greatest attention to it. Let me illustrate through Chopin's D flat nocturne, Op. 27, No. 2:

First, a measure of introduction in the left hand. The melody enters on an accented beat, the next tone falls on the second accent, and is shortly followed by two others, reaching another accented beat of some length, during which a crescendo can be produced in the left hand by accumulation through the pedal, justifying the right hand in participating in this crescendo while rising to B flat in the fourth measure. But here—ay, here's the rub! I know of nothing more heartless than to strike the following A flat in the same degree of strength as the previous tone. It shocks my whole nature when a pianist forgets, in playing this and the following sixteenth notes, how much of its original force the preceding B flat has lost when they

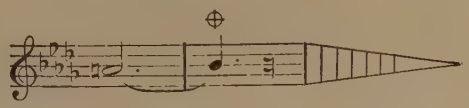
become due. A still stronger example is furnished by the following two measures. The A (natural) lasts through the whole measure, like the first part of a trochee, say, "long - - - - - ing," "yearn - - - - - ing," or similars; now, this note corresponding to this design



sounds: , and the following

B flat ought to be proportioned to the preceding tone, as indicated by the × mark, or enter as piano as the preceding tone has become in consequence of its duration, else the effect is like

This whole matter is very subtle and elusive, and admits not of dogmatizing, but only of suggesting; nevertheless, something like a frequently applicable rule can be formulated from the above design by those who are not altogether impervious to the musical sense of a melody. I would suggest that whenever a long tone is followed by a shorter one, the significance of the first (as to accent, and the place it holds in the phrase or period) should be inquired into, and, if it is found analogous to the penultimate or antepenultimate accent in speech, its decline of power during its continuance should govern the strength of the next tone, especially when that next tone occurs on a weak part of the measure, like the A flat (marked ⊕) in this connection,

or in the next measures,

of the piece I quoted.

It will "humanize" the melody; it will give it life, truthfulness, and—the quality inherent to the latter—beauty! I have mentioned here only one matter in piano-playing for the regulation of which the coöperation of the player's ear is paramount; but of such matters there are a great many, hence I wish to bespeak a more habitual employment of the player's ear on general principles. To hear is not to listen—mind! and if this one point now presented should induce some heretofore negligent student to listen more attentively in future to his own playing, I will promise him three very desirable results: (1) A great many other points, which have hitherto never occurred to him, will present themselves to his consideration; (2) he will instinctively reach an easy conclusion in these considerations and acquire a correct and natural manner of rendering a melody; and (3) all those who have previously listened to his playing out of mere politeness will henceforth enjoy his playing—and that is a rare, a very rare, achievement among students, not to speak of amateurs.

XIII. A CHAT WITH THEODOR LESCHETIZKY

Study of the Classics—Singing Tone of the Piano—Methods with Pupils—Students of Various Nations Compared—Use of Memory.

THAT part of Austria known as the Salzkammergut has long been associated with the history of music, for it was in Salzburg, its capital, that Mozart was born. Possibly it is because of the far-reaching influence of this event that the pretty little village of Ischl, a few hours distant, during the summer months boasts of a larger representation of musical celebrities than does any other pleasure town in Europe. It was in his holiday abode at Ischl that this chat was had with Theodor Leschetizky, the teacher of Essipoff and Paderewski. The writer found a small man, full of life and animation; the most delightful of *causeurs,* in French well-nigh faultless, and with the mild and courtly speech and manner of the traditional Polish gentleman. Imagine yourselves welcomed to his exquisite "Villa Piccola," with its lovely views of mountain and valley on all sides, and some conception of the scene and actors will be attained.

The chat began—a desultory chat. Professor Leschetizky first referred to the study of the classics: "People nowadays think they should commence with Mozart and Haydn; it is with their music, rather, that the pupil should finish. Modern music makes much greater demands upon the performer's technique. When one listens to Beethoven, one forgets the music. When a student has become able to play three Beethoven sonatas, each differing from the other, well, he can play all the others well."

He laid infinite stress upon the singing quality of the tone. "When I was a youth, I was an intimate friend of Lablache's. I gave up lessons and bought my seats at his performances. Lablache used to wonder at my frequent presence at the opera. 'As I listen to you,' I told him one day, 'I create for myself the rules of song at the piano.' "

He attached the greatest importance to a clear understanding of his pupils' characters. "I talk with them during their lessons, and twenty minutes' speech will often be worth an hour's tuition. I make them draw comparisons, and this work is often more fruitful than playing. When I hear that such and such a pianist pleases one more than he did a month ago, I know that the pupil's powers of reflection are asserting themselves. Of extraordinary value, too, are our weekly reunions. On Wednesday, my pupils—last year they numbered upward of one hundred—meet, and a certain proportion play. Then I am able to study a pupil in presence of an intelligent and experienced audience. The women are usually best prepared, for they have natural finesse and keep closely to the teacher's instructions. The teacher must have a distinct point of view, and the pupil must not lose sight of it. Later he will be accorded more liberty. When the desired end is attained in these assemblies, I discern the pupil's special characteristics. In the course of a private lesson this would be difficult. On Wednesdays I am part of the public, and the pupil performs as though he faced a thousand listeners. His specialty once revealed, my lessons become wholly different.

"Schumann observed: 'There are no good teachers unless there are good pupils; the latter must do at least as much as the former.' Russia furnishes the larger number of promising students, and Austria comes next. Northern Germany is strongest in regard to mechanism and rather tiresome clavierism; Norway is well represented, and the King of Sweden has done much to help the cause of music and its exponents. I like the Americans; they are in a hurry, but they are seekers—*des chercheurs*. They are hard workers—too much so, perhaps. I hate being told, 'I worked eight hours today,' when half that time would suffice. Nor do I care to have much ground covered. I prefer two pages played with finish to the longest piece. Ambitious pupils often ask, 'When shall I play in concert, with an orchestra?' The performance of a sonata is much more difficult; an orchestra steadies you, gives you an opportunity to rest, and to start afresh with a new impetus. I am, let me add, very autocratic as a teacher; democracy in tuition is quite out of place, and I admit of no discussion.

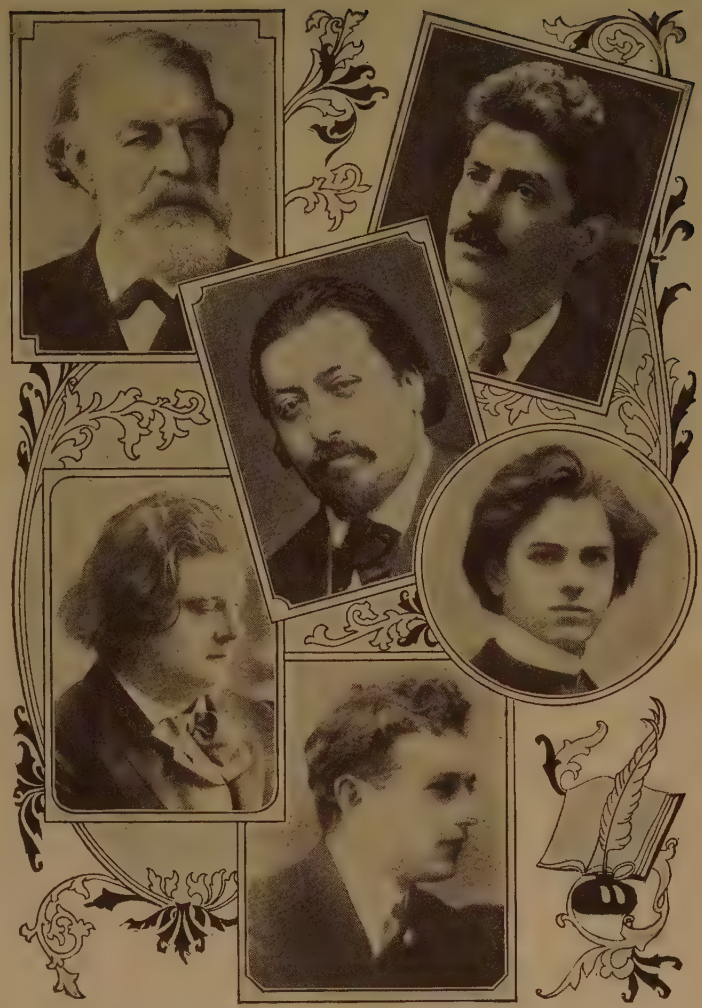
"Mechanism is more widely diffused at present than it was in the past. It is a good deal like acrobatic feats: first some one turned a double somersault, then a triple, and finally a quadruple one. Nowadays, too, pupils have more frequent opportunities of hearing great performers. On the other hand, professional critical opinion is less accurate than it was, because exposed to more numerous and varying influences. The use of the memory in music has grown immensely; had it not, Wagner would be impracticable. In my time, Beethoven's last sonatas were never played without notes; even Liszt, after 1857, shrank from the effort. Fugues were the great things, and they were seldom memorized. The infant prodigies—do not despise them, a great man must have commenced somewhere—first resorted to memorizing. Liszt played his fugues from memory—Bach's prettiest and most effective, of course—and Sophie Bohrer had twenty-four of them by heart. A good system of committing helps; the music should be studied phrase by phrase, and each part thoroughly digested before further progress is attempted. The singer derives great assistance from the words, the instrumentalist none. The effect of Wagner's music upon the use of the memory has been marked, and the continual increase in the number of skilled conductors has vastly broadened that composer's influence, ability to memorize his music growing proportionately. The process is in some respects a mechanical one, but it has been useful to music generally. In my time, a musician sang the note; now he speaks it."

XIV. SCHUMANN'S "VOGEL ALS PROPHET"

By William H. Sherwood

Schumann's Inspiration—How to Analyze a Composition—Application to the Present Piece—Rules for its Correct Interpretation and Performance.

THE finest qualities of genius, the combination of which would distinguish painter, poet, and musician, are united in the rare beauties of many of Schumann's smaller and less ambitious works. So many pretty legends are found in German literature, such attractive tales of the past are told in connection with the places visited by tourists in Germany, that one can believe this most sensitive and imaginative tone-poet had in mind some story of pathetic or sentimental interest, or some omen implied by the singing and flitting of a bird to suggest such a composition and title. I shall leave the reader to follow the suggestions of his own imagination or sentiment. The student, however, needs more practical aid in order to master the difficulties of execution, expression, and artistic delivery presented by this piece.

As in Rubinstein's "Etude on False Notes," almost every *accented* note of melody in our principal subject is *dissonant* to the harmony belonging thereto. The

JOSEPH JOACHIM
EUGÈNE YSAYE
HENRI WIENIAWSKI
MISCHA ELMAN
FRITZ KREISLER
JOHANN KUBELIK

HENRI MARTEAU
HENRI VIEUXTEMPS
MAUD POWELL
PABLO DE SARASATE
NICCOLO PAGANINI

next succeeding note (in each case) is the harmonic "resolution," or tone showing to what chord the voice containing the preceding dissonant tone belongs. The student should examine and *listen to* this harmonic blending of tones, and be able to explain each chord and its accessory notes as used by the composer, to trace the relation of one chord to another in the sequences and phrases, and that of the whole group to the keynote. Notice the modulations from the principal to related keys. Notice the proportion of measures and phrases in the original key (G minor) and in related keys, and their arrangement and order. Notice the transition from G minor to G major at the "Trio," or second part of the composition; the relative length of the different parts; the number of phrases therein; the transition from the "Trio" to the repetition of first subject in the original key. Notice the contrast between the quick, flitting arpeggios and sympathetic, weird accents in the first subject, and the smooth legato phrases and more happy, serene expression of the second. The phrases throughout the piece begin on the fourth beat of the measure (in $\frac{4}{4}$ time), and end variously on the second or third beat of a succeeding measure.

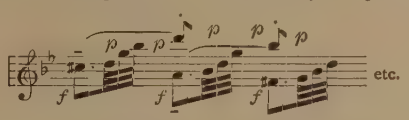
A musical phrase is equivalent to a sentence in speech, conveying a complete idea to the mind of the listener. This being the case, I consider the first two groups (two complete measures) equivalent to a phrase, although divided by nearly half a measure of rests and by several slurs. Looking at it another way, one might call the entire first four measures (i.e., *parts* of measures at the beginning and end and three full measures between) one phrase, containing antecedent and consequent divisions. Combine the natural measure-accent in $\frac{4}{4}$ time with the general habit of accenting each dotted eighth note. A correct taste in outlining a plan which settles the relative importance of such features is as important in connection with the foregoing analysis of the music as is an accurate map to a surveyor or a correctly proportioned drawing to an architect.

Form is the first element that is apparent in plastic art; perhaps the last to be comprehended in music. By taking mental account of the harmonic, melodic, and rhythmic structure of a composition, including such elements as are here suggested, we may spend our practice time to far better advantage than would otherwise be possible. There is scarcely a measure in which combined good judgment and natural taste would not dictate decided rules for crescendo and diminuendo effects. I have endeavored to mark such as my particular experience suggests. The rule of crescendo when ascending the scale and diminuendo when descending generally proves good.

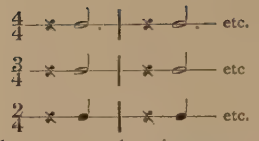
Every complete sentence has its noun, verb, and their modifiers. The relative importance in meaning of such words is expressed by a good speaker by great variety of intonation. The relative values of notes in a phrase are equally varied. The average phrase should commence with a subordinate accent, gradually increase (crescendo) toward some high note or some principal measure-accent near or beyond the middle of the phrase and decrease toward the end. There may be two climaxes of unequal importance in one phrase, and there is nearly always a series of phrases leading toward a climax, and forming a separate "period" for each division of a piece.

Turning to our subject, "Vogel als Prophet," we find in the ninth, tenth, eleventh, and twelfth measures a continuation of melodic phrases in regular sixteenth notes alternating with the typical motif figure

At the ninth measure the left hand uses the first subject, as given out by the right hand at the beginning of the piece, as a counterpoint *against* the new motive of sixteenth notes. The manner in which the dialogue of voices begun at this point is carried out in subsequent measures should be clearly unraveled and each motif traced to its own ending. For example, in the fifteenth measure, each *beginning* on a dotted eighth note is marked forte, and sustained (legato). The *continuation* of each motif is marked piano and ends staccato.

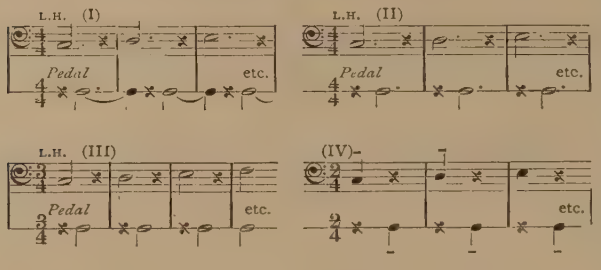
It is a good general rule for pianists to raise the fingers one to two inches from the keys preparatory to playing ordinary running passages. But such are the delicacy and rapidity necessary in playing these (unaccented) triplets of thirty-second notes that expressive playing can be better accomplished if the fingers be kept quite close to the keyboard (generally curved) for the thirty-second notes, and held high only for the accented eighths. It is difficult to play some of these figures smoothly according to the fingering used in the ordinary editions. The writer believes that the following plan of practice will obviate much of the difficulty of controlling the damper pedal and at the same time develop accurate taste. The fingering marked throughout is satisfactory *only* when the

pedal is used as indicated. Artistic pedal playing requires better teaching, better self-control, and better taste than is at all usual among pianists. Music publishers would do well to adopt a new and more accurate system of pedal marks. The following sign (⊢┐) here denotes the exact time for beginning and ending the pedal tread. Many players are so in the habit of putting the pedal down with the accented beat that it is very difficult for them to acquire the control and discrimination here required. Others are too violent, putting the foot down heavily and lifting it too high. With ordinary pianos a half-depth is enough for the use of the pedal, and a silent lift, not high enough to lose contact of the foot with the pedal, is generally sufficient to dampen accurately, and can be done delicately enough to avoid all unnecessary noise. Most pupils practise too fast, and many do not appear to *listen* to their own playing. For such this article is not intended.

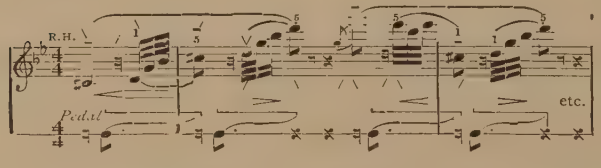
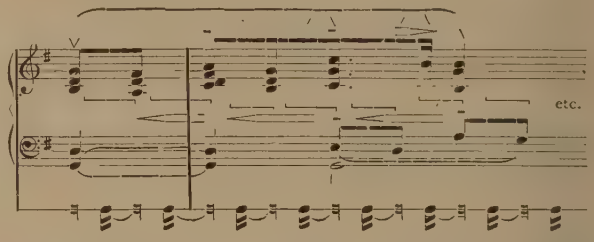
Exercise for slow practice. Damper pedal alone. Count four. Release pedal at *one,* put it down at *two,* keep it down until exactly *one* of next measure. Next count three. Then count two. Care must be taken to keep the pedal down the complete time of the second, third, and fourth beats, and to let it up the *full* time of



the first beat; also to see that its use causes no noise. The next exercises are to be practised very slowly and with equal accuracy and care of pedal and hand.

The result in each case above illustrated (except No. 1) should be an exact legato, without either disconnecting or overlapping the tones.



Applying the above to "Vogel als Prophet," count sixteen to each measure, or four for each quarter note or its equivalent. Hold the notes the exact time indicated; ditto pedal. Keep the foot up from the exact beginning of rest until time to put it down. Unless complete control of time for different details is developed this practice is of little value. Substitute the each measure in the "Trio," also, in preliminary pedal pedal mark (⌙) for the above. Count sixteen practice.

The sixteenth rests written above are not to appear as rests in the expression of the music. The use of pedal correctly controlled will always give the result of continued legato as in the original, but, if allowed the privilege of taking the hand up at the intervals indicated by the rests, the player can in each instance stretch the hand over the next group of notes, and thus, through the use of the fingering indicated, be enabled to play more readily with delicacy and repose. A still hand and complete legato finger-touch are advisable during the continuance of each slur in the "Trio," unless during an accented climax. The method much used by Rubinstein, D'Albert, Paderewski, and others, of undulating the forearm at the wrist while keeping the fingers at or near the keys between phrases, can be so applied as to add finish and grace and improve the tone. It is neither generally well understood nor used with artistic effect, and it is difficult to teach. The more common habit of throwing the hands up and down from the wrist, while entirely correct for many kinds of staccato, is unsympathetic and artificial when applied to such phrasing and such expressive music as we have in "Vogel als Prophet." The common habit of mixing up finger, wrist, and knuckle-joint action indiscriminately causes players who otherwise show good qualities in regular legato playing to play staccato and half-staccato badly, and to phrase worse. The

marks \ and / show examples of down or up wrist (not hand) movements. The mark ⌣ indicates a combination (undulation) of both movements, usually to be effected in a very mild, not exaggerated, manner.

As the measures after the twenty-seventh are a repetition of the first page, the student is advised, where marks are omitted, to learn and play the piece as marked at the beginning.

MODERN INSTRUMENTS, CHIEFLY ORCHESTRAL
THEIR PREDECESSORS AND PRESENT USES

THE RISE OF THE MODERN ORCHESTRA

ALTHOUGH our modern orchestra owes its composition and development directly to the musical drama which sprang into being in Italy at the end of the sixteenth century, calling into requisition most of the instruments known at the time, the evolution of the orchestra really began with the first grouping together of simple reed-pipes, flutes, primitive harps and drums, in which the three orders of musical instruments, percussion, wind, and strings, were duly represented. In fact any large group of instruments has been called an orchestra. Greece witnessed some notable ones, but others must have existed in Egypt at an earlier date.

In sketching the history of the orchestra we are not only concerned with its physical constitution, but also with the use made of it as a complete body (1) to accompany the voice, the dance, or any other rhythmical action; (2) to characterize and comment subjectively upon what the voice has to express; (3) to express more or less indefinite emotions, thoughts, and musical ideas without the aid of words.

Evidences of the first and most popular of these functions of the orchestra abound in every civilization from the earliest historic times. Bands composed of such stringed and wind instruments as were known at the time were called into requisition for religious rites and ceremonies, military displays and festivals, banquets and obsequies. The orchestra in some form or other has, in fact, from the earliest times formed an integral part of the life of the people.

The second and more subjective function of the orchestra marks a great advance and presupposes the existence of some form of drama with music, the most perfect form of which was the classical Greek drama, more closely allied to the modern music-drama of Wagner than to the literary drama. Although the musical ideals of classic Greece were diametrically opposed to the orchestra as understood at the present day, yet it was the Greeks who conceived the idea of the true function of the orchestra in musical drama.

The third function of the orchestra was the performance of purely instrumental music, which modern usage divides into the two schools of absolute and programme music. Absolute, or pure, music aims to please merely by beauty of sound, while programme music tries to give a definite picture of objects, events, and the emotions they arouse. The Greeks made no such distinction, but possessed both schools.

The Greek tragic writers strove to make their music represent the different phases of action, and the feelings of the characters; we have reason to believe that they succeeded, but unfortunately none of the music of the tragedies is extant.

Egypt.—A fresco to be seen at the Britism Museum, copied from a mural painting in Egypt, and dating from between 1700 and 1300 B.C., represents a band at a gentleman's house, celebrating the festival of the god Ptah; women musicians are included in the band; one is playing a double flute and three maidens are marking the rhythm by clapping their hands. From other frescoes we find that Egyptian bands consisted of many instruments, such as harps, guitars, lyres, lutes, flutes, single and double pipes or shawms, trumpets, cymbals, drums, sistrums, etc. Harmony, as we understand it, was unknown to the Egyptians, but they used the different instruments in octaves, with perhaps a drone or ground bass, to vary the tone-color and volume of sound. It is evident from the innumerable traces remaining to us that music was highly esteemed as an art in Egypt at the time when civilization had reached its apogee; fragments of treatises on papyrus, relating to the tonal art, have been discovered. Conservatories existed, and the few pictures of them that still remain prove that they were much like our own institutions, with special rooms for teachers, and even a lunch-room.

India.—Far more definite and accurate are the evidences of the high degree of cultivation attained in this art among the Hindus and Chinese; of the latter, however, little need be said, as their arts had almost no influence on those of Europe. Hindu music, on the contrary, had certain affinities with that of the Greeks. Hindu treatises on music, of great antiquity, in prose and verse, are extant. Hindu instruments were many and comparatively perfect, the stringed predominating, a sure sign of the high development of the art. Music was closely connected with religion and its many rites. We know, however, that it had at least one secular use in the drama, said to have been invented in prehistoric times by the sage Bharata (a mere personification, since the word Bharata signifies an actor). The most ancient specimen is a drama treating of the history of the god Krishna, which is still extant, and contains songs and choruses. At a much later period (56 B.C.) the great drama of Sakuntala was composed by Kalidasa, containing songs with instrumental accompaniment. The chief musical instrument was always the vina, much like a narrow guitar with seven strings. The ravanastron was an elementary violin with two strings. Chinese music as given in Europe and America is chiefly noise, but such instruments as the kin and the che, provided with silk strings, are exceedingly delicate in effect. In Japan, the koto is of the same type, while the samisen is a sort of three-stringed mandolin.

Greece.—Among the Greeks music had a high and noble significance; it was studied from a philosophical point of view, and aimed at appealing to the mind and soul, rather than to the senses. It was thought that Pythagoras had invented the diatonic and chromatic systems of natural scales, but a double reed-pipe found in 1890 by Prof. Flinders Petrie in the mummy-case of the Lady Maket, dating from at least

1100 B.C., when played gives both a diatonic and a chromatic scale, which leads us to think that Pythagoras, during the eighteen years he spent in Egypt, may have learned these systems from the Egyptian priests and introduced them into his native country.

Greek Drama.—The earliest music in Greece was used in religious rites and military evolutions, but with the rise of the drama came the use of the orchestra, as we understand it, in the theater or concert. The word orchestra is derived from the Greek word ὀρχέομαν, to dance. It was applied to the space between the auditorium and the proscenium or stage, in which were stationed the chorus and instrumentalists; the latter consisted chiefly of players on the aulos (the reed-pipe, either oboe or clarinet) and the cithara or phorminx. The chorus danced at intervals round the thymele or altar to the god Dionysus, singing an explanation of what was going on on the stage in unison, with instruments playing in unison and in octaves with the voices, or perhaps even with a harmonic basis of instrumental music. Unfortunately none of the music is extant. The primary function of the orchestra in classic Greece, therefore, was not to accompany, but to make clear by music the action of the drama, which was thus the prototype of the modern musical drama. Wagner, therefore, did not revolutionize, but revived the old classical traditions.

The Tragedy.—The Greek drama comprised tragedy and comedy. It is with the former that we have most to do. Tragedies (derived from τράγος, a goat, and ᾠδή, a song) were so called on account of the goats sacrificed to the god Dionysus, and were gradually evolved from the fusion of (1) the dithyramb, a hymn in honor of that god, usually accompanied by auloi and citharas, and (2) rhapsodies—epic poems chanted by wandering rhapsodes to instrumental accompaniment.

To Thespis (535 B.C.) is attributed the invention of the tragedy. He was the first to introduce an actor to vary the monotony of the dithyramb; this actor stood on a table—the embryo stage—and addressed his chanting speech to the coryphæus or chorus. Æschylus (525-456 B.C.) added a second actor, Sophocles (495-405 B.C.) a third. These writers were also musicians, and composed the music for their own dramas. Euripides, however, was no musician, and we hear that he had to engage a professional to compose the music for his dramas. The orchestra did not increase in numbers until the days of the Roman drama.

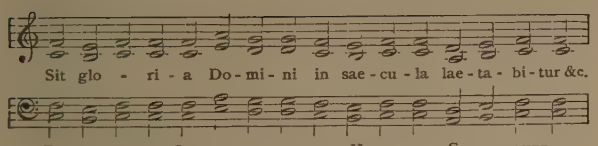
Roman Drama.—The Roman drama was founded on the Greek, with the addition of native forms. The first regular performance of a Roman drama in a theater was in 240 B.C. The main differences between the Greek and Roman dramas are that in the latter more voices and instruments were used, the trumpet, buccina, and lituus being added; and that the chorus was transposed to the stage and occasionally took part in the acting. The Romans, even more than the Greeks, were decidedly fond of wind instruments. They had examples of almost every one that we possess, although our flutes, oboes, bassoons, and so on, did not come directly from the Roman models.

Downfall of the Drama.—Dance and song gradually ceased to form part of the tragedy. This was the beginning of the end; the downfall came in the middle of the fourth century A.D. Morality being at a very low ebb on the Roman stage, the Church condemned the theater, and the drama died out completely till the fifteenth century.

Monasteries and Churches.—In the interim, the fostering of the art of music was left entirely to the monasteries, so far as vocal music was concerned. Instrumental music was banished from the early Church ritual, being too much associated with the ribald, sensual music of the Roman theater, and it would have fallen into disuse but for the musicians, who, after the closing of the theater by order of the Church, wandered through the country playing and singing at festivals, appearing and disappearing without leaving a clue to their whereabouts.

Europe.—No trace of harmony has as yet been discovered in Europe before the tenth century; a number of instruments still either playing in unison, to increase the volume of sound, or to give color by varying the use of the instruments according to the effects required. From some allusions in the old chronicles of England it is thought that harmony was known and practised in many parts of the land, especially in Northumbria, before the days of Hucbald. There were many schools of music in England at the time of Alfred the Great, notably at Oxford; and we find that he conferred the title of Professor of Music upon a teacher of theory in 886.

First Steps in Harmony.—The first steps in harmony were made in the beginning of the tenth century, when Hucbald, a Flemish monk, introduced into the Church ritual two-part songs or chants, in which the voices or parts moved in fourths, and very harsh and discordant they sounded. Octaves were used to double the voices, thus bringing about fifths also. This first step in the evolution of harmony is important, as, although it only concerned the voice at first, the development of instrumental music was impossible without it, and from this date instruments were no longer used merely to accompany the voice, but followed closely the development of harmony, which may thus be regarded as directly responsible for the invention of certain instruments and for improvements in the construction of others. This is not the generally accepted theory, but an examination of the construction of the organistrum taken in conjunction with the origin of its name leaves no room for doubt on this point. The organistrum, which appears on the Romanesque sculptures and in the miniatures of the eleventh and twelfth centuries, owes its existence directly to Hucbald's organum, or diaphony, as it was called. The organistrum had three strings tuned to the octaves of C with an intermediate F or G, and all sounded at once by the friction of a wheel set in motion by a crank. By means of keys or movable frets fixed along the neck and taking effect on all three strings at once, the succession of octaves and fifths known as the organum was produced. No other style of music was obtainable from the organistrum, and it stands as a unique instance on record of an instrument invented for a special form of music and incapable of producing any other. When the organum no longer found favor and had been replaced by polyphony on a ground bass, the organistrum was modified to produce the new style of harmony and survived as the symphonia or hurdy-gurdy.



EXAMPLE OF THE ORGANUM, ASCRIBED TO HUCBALD BY COUSSEMAKER.

Guido of Arezzo, in the early part of the eleventh century, developed the free style of diaphony, and systematized the intervals. Free diaphony caused certain harsh intervals to be modified, and Guido emphasized the idea that music should please. In the organum, the lower voice was not allowed to go deeper than a certain prescribed position. If the upper voice started on this note, the lower voice merely repeated it until the upper voice had gotten a fourth away, when the harmony proceeded in fourths, the lower voice moving up and down as needed, but never going below its fixed limit. Guido named and described the new intervals formed in this process. He also allowed the upper voice to be more florid in style than the other, thus giving the effect of a cantus firmus with descant in a higher order of counterpoint. Guido is famous in history because he gave syllables to the notes of the scale—another invaluable service to music.

Polyphony.—Guido died about 1050. His system of organum was soon superseded by one that included contrary motion as well as oblique and parallel motion. This new organum was well developed before 1100, for in that year Johannes Cotto wrote a treatise on it. An English neume manuscript (the Winchester Troper) shows contrary motion dating from the year 1080. Fourths, fifths, and octaves were the chief intervals, but the others soon came into frequent use. From this system came the rise of part-writing, which led to the early English school of counterpoint, and from that to the French, Flemish, Italian, and German schools—a development that forms a large part of musical history, finding its echo and culmination in the glory of Bach's inimitable fugues.

There is reason to think that the contrapuntal part-songs formed part of the repertoire of instrumentalists from an early epoch, independent instrumental music being of later date. As an immediate result of the introduction of polyphony, such instruments as lutes, vielles, flaiols or flûtes à bec, shawms, cromornes, cornets, hunting-horns, and bagpipes were made in different sizes corresponding approximately to the pitch of the human voices, treble, alto, tenor, bass. This forms a very important step in the evolution of the orchestra.

Counterpoint.—The term counterpoint came from the Latin words "punctum contra punctum," or note against note. In the higher orders several notes could be sung against one. Counterpoint was first developed in England, being merely the part-writing (melody supported by melody) that arose from the new organum. Measured notes were discovered in England by Walter Odington, and Franco of Cologne invented them at about the same time. Jean de Muris, writing in 1325, praised the French school of the preceding century, and at the same time stated that it was based on the English method. There must have been a fully developed English school soon after 1200, for the famous "six men's song," entitled "Sumer is icumen in," dates from about 1215. This was a remarkably perfect and pleasing four-part canon, the two extra voices giving a drone bass. We may safely assert from this that counterpoint flourished from 1200 to 1600. The troubadours and other minstrels of their day composed in the monodic style suitable for solo singing; but almost all their music is lost. It was not until the advent of opera that the contrapuntal style had any real rival for supremacy.

Town Bands.—We must now return to instrumental music and see how the first regular orchestras were formed in towns. The returning crusaders brought many new instruments with them from the East, giving a fresh impetus to instrumental music. The minstrels and bards in England, Scotland, and Wales, the troubadours of Provence, the trouvères of Normandy, and the minnesingers of Germany, wandered from castle to town, sang their love-ditties or their heroic songs to the fiddle or harp, for the love of the art or of an adventurous life. They often brought in their train mountebanks, pipers, or jongleurs, who were actors and musicians of a professional nature, and who played accompaniments on divers instruments to the minstrels' songs, with interludes of acting, mimicry, juggling, etc. These pipers, when tired of their roving life, often settled down in towns and formed guilds or town bands, especially in Germany and the Netherlands. To the southeastern part of France belongs the honor of being the pioneer to the romantic song movement. There are frescoes and pictures extant depicting some of these medieval bands; a bas-relief of the eleventh century, from a church in Normandy, shows an early orchestra, composed of two rottas or crwths, an organistrum, a syrinx, a psaltery, two harps, and instruments of percussion. We know, from the Manesse manuscripts at Paris, that Frauenlob, the last of the minnesingers, who flourished in the thirteenth century, was also an instrumentalist. He is shown in an illustration, seated on a high platform, conducting a little band of stringed and wind instruments. All these instrumentalists are at rest except the chief musician, who is evidently a great master, performing on a four-stringed fiddle; all are listening with rapt attention, and he is standing on a special carpet just unrolled by two boys. Some sort of conducting was evidently practised, even in those days, for Frauenlob is depicted with a long stick in the left hand, and his right held up, to command attention. At the end of the Middle Ages it was customary to conduct by beating a stick on the floor; in fact, Lulli met his death through accidentally pounding his foot with the conducting-stick. Probably Frauenlob's stick was for use in rapping out the time. In a Spanish manuscript of the thirteenth century, in the Escorial Library, is a series of miniatures representing fifty-one musicians of the period, playing various instruments. Albrecht Dürer has left us many pictures on musical subjects—notably one of the Nuremberg town band, in the town hall of that city, consisting chiefly of wind instruments. The two slide-trombones resemble the modern ones as nearly as possible.

Mysteries, Miracle Plays, etc.—The mysteries and miracle plays were sacred dramas performed at first

by monks in churches, and when afterward, with an admixture of secular element, they developed into moralities, interludes, and, later still, into plays, dramas, and masques, they were performed in the streets, in the courtyards of inns, in tents, and finally in the theaters, the first in England being that built by Burbage in Shoreditch (1576-77). All these plays were interspersed with short preludes of descriptive music. Appropriate instruments were used to attune the mind of the spectator to receive certain impressions. These early dramatic productions were preparing the way for the opera during the thirteenth, fourteenth, and fifteenth centuries. In England the transition from the masques, set to music by Lawes and Purcell, seemed but a step, and took place quite naturally and easily during the lifetime of Purcell, but the idea and name of opera were borrowed from Italy. In France the masques were called ballets, and continued side by side with the opera.

Revival of the Drama.—It is to Florence that the honor is due, not only for the renaissance in painting, but also in music, at the end of the sixteenth century. In striving to bring back the glories of the old Greek tragedy, incomplete without its music, which was lost, a small number of Tuscan art-enthusiasts came upon the idea of the modern opera at a time when the rest of Italy, Germany, and France were devoting their musical talent to the composition of elaborate Church music. One of the enthusiasts, Galilei, perceived that the expressive solo song was essential to the drama, and he composed, in 1580, a dramatic scena or cantata called "Il Conte Ugolino," for one voice, with accompaniment on the viol. This was a complete success, and was followed in 1594 and 1600 by the two earliest operas, "Dafne" and "Euridice," by Jacopo Peri. In the latter we find the idea of the dramatic recitative on an instrumental bass. Peri's orchestra consisted of a cembalo, a chitarrone, a theorbo, and a large lyra or guitar-fiddle. Larger orchestras than this were usual in Italy, for in 1565 intermezzi, little *entr'acte* scenes of instrumental music, song, recitative, and dialogue introduced between the acts of the spoken drama, and also the "Symphoniæ Sacræ" of the two Gabrielis, were scored for no less than twenty-one different kinds of instruments. It seemed as if Italy had been waiting for the opera, for it found favor at once, and Peri's impetus produced writers of operas, in an incredibly short time, in all parts of that country.

Our Orchestra.—We owe the composition of our orchestra to Monteverde, of Cremona, who was the first to see that the best balance is obtained by having a preponderance of stringed instruments. His orchestra in 1608, when his opera "Orfeo" was produced, consisted of two gravi cembali, two violins, ten viols, one double harp, two chitarroni, two positives, one regal, three viols da gamba and two double basses, four trombones, two cornets, one small octave flute, one soprano trumpet, and three muted trumpets—in all twenty strings, against eleven wind instruments and three keyed. Monteverde anticipated Wagner's principle that the exigencies of the action and the requirements of the texts should rule the musical design of the lyrical drama, and the instrumental portions should, quite as much as those assigned to voices, illustrate the progress of the scene and the significance of words. The latter is exemplified by Monteverde's use of particular instruments for the music of particular persons, so as to characterize every member individually. In his opera of "Tancredi e Clorinda" Monteverde depicts in the orchestra the feelings which the voice is not able to express alone. Making a great advance in the use of bowed instruments, he invented the tremolo on strings to thrill the audience when Tancredi mortally wounds Clorinda by mistake. He also invented the pizzicato to imitate the clashing and drawing of swords.

Old Instruments.—Many of the instruments used by Monteverde are now obsolete. The regal was a tiny portable organ, the positive being larger and stationary. The chitarrone was a large lute. The viols were the predecessors of the violin family, our present double bass (violone) being a survivor of the viol type. The viols were flatter than the violins, their tones being quieter and sweeter, if less brilliant. The smallest was the treble, or descant, viol. Then came the tenor (viola da braccio). The bass (viola da gamba) corresponded to our violoncello. The latter name, meaning "little violone," is incorrect, because the cello is not of the viol type. The Italian guitar-fiddle, or lyra, led to the violin. Gasparo da Salo is acknowledged as the first violin-maker, though some claim the invention for the Tyrolean Tieffenbrücker. The Amati family, Stradivarius, and the Guarneri brought violin-making to a perfection that it has never reached in later days. By the time of Alessandro Scarlatti the violins had almost wholly replaced the viols.

Instrumental Church Music.—For centuries the Church had been content with rich polyphonic choruses in many parts, with the accompaniment of organ, viols, trumpets, trombones, or cornets, or with viols alone; but the love of color of the Venetian masters in music, no less than in painting, led them to introduce into Church music two, or sometimes even three, complete choirs, with rich (for that time) orchestral accompaniment. The founder of the Venetian school was Willaert, a Dutchman, who had studied in Paris, and his pupils, the two Gabrielis (1510 to 1613), wrote innumerable "Symphoniæ Sacræ" for voices and instruments.

Growth of Instrumental Music.—With the musical drama grew the individualism of the various instruments. The violin family in particular received great attention. The beautiful instruments turned out by the Cremona makers encouraged virtuosi to try their skill to the utmost, and composers to write solos to show off the capabilities of the instruments. The first to write a solo for the violin was Biagio Marini, who died at Padua in 1660. Till then, if an executant on a viol wished to play alone, he chose the treble part of a madrigal or part-song. Marini had a host of followers who imitated him. We find the variation form invented by Vitali, and the concerto, in its elementary form, by Corelli (1653-1713). During the second half of the seventeenth century the overture was also invented by Lulli, a Florentine brought up in Paris. A scullion at first, he showed great musical ability, and soon became a leader in the art. Though nominally writing in the ballet form, he brought operatic music in France to a high plane, and stood as a model for Purcell. Lulli made many improvements in the or-

chestra, including the introduction of the kettledrum.

In Monteverde's days only a little prelude of eight or nine bars repeated preceded the opera. "Lulli's overture," or the French (1672-86), was composed of two movements, the first slow and majestic, the second rapid, and it had no connection with the action of the opera to which it was prefixed. The Scarlatti or Italian overture consisted of an allegro, a short adagio, and a second quick movement or a repetition of the first. Handel wrote his overtures on Lulli's form, much elaborated. Gluck was the first to write overtures analogous in style and sentiment to the opera which followed, but even he did not include in his overture themes from the opera; this improvement was carried out by Mozart in his "Don Giovanni." Beethoven attained to the highest pinnacle of dramatic art and of elevation of style in his overtures, notably that to "Egmont" and "Leonore" No. 3. Weber invested the overture with the richest local color and romanticism, and Wagner with the grandest and most splendid orchestration.

At the end of the sixteenth century the word sonata began to be used by the two Gabrielis in Venice, for organ compositions. It seems to have been applied to a portion of a larger work of which the rest was vocal. The sonata was brief, solemn, slow, pouring forth volumes of sound. The word was similarly applied in Germany (probably through Heinrich Schütz, a pupil of Giovanni Gabrieli's, who composed the first German opera, in 1627, to the text of "Dafne"). In the seventeenth century, when instrumental and solo music began to develop, the sonata assumed a certain definite form under Bibers and Corelli, who wrote for the violin. It consisted then of four or five movements more or less like a "suite de pièces," and kept this form under Domenico Scarlatti and Bach. Kuhnau was the first to write sonatas for the harpsichord. Haydn, by introducing two contrasted chief themes, in properly related keys, followed by a closing theme, perfected the sonata form. Mozart followed in his footsteps. It was Beethoven, however, who gave us the perfect sonata as it now stands, with four movements, of which the first at least is in the sonata form. The symphony, a sonata for orchestra, the concerto, the chamber quartet and trio, etc., all are built on this grand plan of the sonata. The first to perfect the symphony was Haydn; Mozart used it fluently, but Beethoven, with bold regenerating touch, gave it what it required to make it a great art-form.

The Modern Orchestra.—Our orchestra practically began to assume a definite shape, and to have an independent existence, as well as music and laws of its own, with the revival of the drama in the seventeenth century. As the instruments were improved, new ones introduced, and old ones abandoned, instrumentation became a new and favorite study in Italy. Musicians began to find out the capabilities of various families of instruments, their value in special effects, the kind of music most suitable to each, and also to feel their way about the immense field of resources opened out to them. The possibility of using some of the instruments as solo instruments, by encouraging virtuosi to acquire great skill, raised the standard of excellence of the whole orchestra. Monteverde had felt the need of the preponderance of stringed instruments in the orchestra, and his successors, who had the perfected Cremona models at their disposal, soon established a properly balanced quartet of strings, and ejected all stringed instruments not played with the bow, except the harp. The proper understanding of the compass and capabilities of wind instruments was of later date. They were chiefly used to double some part of the string quartet at first.

The effort of reviving the drama and of creating instrumental music seems to have exhausted Italy, for during the eighteenth century the orchestra occupied a very secondary position in Italian music. The evolution and perfecting of the orchestra was continued chiefly in Germany during that period.

In the scores of Lulli we find almost all the numbers given to the stringed instruments; but there are also certain selections for wind instruments (oboes and bassoon, flutes). It was then held that the instruments starting a selection should finish it, and no other kind should join. If this rule was disregarded, the result was called "broken music." The existence of this term may imply that the rule was not strictly kept, but "broken music" was generally considered incorrect. In France, it was not until the advent of Rameau that the wood-wind was used in free parts to enrich the harmony of the strings. But Germany had a world-genius in Johann Sebastian Bach, who used instruments with the independence of real greatness. The strings predominate in his music, but it demands many other instruments, and shows a wealth of tone-color. Among the instruments that he used are, besides the strings now employed, a violino piccolo, a minor third above our violin; the viola d'amore, a tenor viol with seven catgut strings and seven steel strings for sympathetic vibration; the viola da gamba; the lute; and the violoncello piccolo, a small-sized cello. The wind instruments include both the traverse and the straight (beak) flute; the piccolo; the oboe d'amore, a minor third below our oboe, and the oboe da caccia, a fifth below ours; the bassoon; the cornetto, a wooden trumpet, known in a deeper form as the serpent; horns, trumpets, and trombones in four sizes, soprano, alto, tenor, and bass; a slide-horn, a slide-trumpet, and a curved trumpet called the lituus; also there were kettledrums. Many of Bach's works demand organ accompaniment. His great contemporary, Handel, preferred the harpsichord to the organ. Handel disregarded the old oboes, cornetto, small violin, and small cello, and used the viola da gamba only rarely. He included in his forces two large lutes (arciliuto and theorbo) and the harp. He experimented with the chalameau, the predecessor of the clarinet; and he used our present oboe very freely. Haydn, the "father of the modern orchestra," banished many of the older instruments. His orchestra consisted of first and second violins, violas, violoncellos, double basses, flutes, oboes, bassoons, horns, trumpets, and kettledrums. Mozart added the clarinet, and Beethoven the trombone. This is what is known as the classical orchestra, and Brahms has shown that the greatest modern music may still be written for these forces.

It is not only the number of different instruments, but the manner in which they are used, that gives a composer's work its special style. With Bach, they

are almost always employed contrapuntally, weaving an orchestral texture of melody. Handel was more modern in style, full of dramatic effects, experiments, and direct power of melody. Haydn was clean-cut in style, and a pioneer in the study of tone-color. The classical orchestra consisted of three main divisions, strings, wood-wind, and brass; and the great symphonists exploited the tone-color of groups as well as of single instruments and their combinations. Beethoven was a consummate master of tone-color, and his development of the latent possibilities in the different instruments has gained for him the title of "liberator of the orchestra." Schubert wrote fluently, and emphasized the wood-wind, but came to feel that his lack of contrapuntal knowledge was a handicap. Weber made the tone-color of horns and clarinets seem very effective. Mendelssohn excelled in delicate effects, like those of the "Midsummer Night's Dream" music; but the lonely, brooding spirit of his "Scotch" symphony and his "Hebrides" overture helped to earn him the title of "le grand paysagiste." Schumann was better at composition than at instrumentation, but now and then he gives a graphic touch, like the transition from the slow movement to the scherzo in his first symphony. Tchaikovsky obtained new and wonderful wood-wind effects. But the great master of modern instrumentation was Wagner, whose glowing masses of tone seemed a revelation of orchestral beauty. He obtained his results partly from the new instruments of his time (English horn, tubas, etc.), but chiefly by the device of dividing the forces of each instrument, thus giving a chord instead of a note to each one of several different kinds of instrument. This produces an extremely rich and pleasing tone, and this procedure is much used in modern orchestration. Before Wagner, Gluck had been the chief apostle of realism in operatic music, and he introduced into his operas many clever effects of tone-color—the anger of the Furies at Orpheus, the barking of Cerberus, etc. Schumann was responsible for the introduction of valved horns and trumpets, of which the former have become invaluable in modern music. At present Richard Strauss is the leader in orchestration, going even beyond Wagner in intricacy, even if his music does not usually equal Wagner's in charm and attractiveness.

The art of conducting an orchestra, upon which so much depends nowadays, is of comparatively recent date. Concerts and operas used to be directed by a musician seated at the piano (earlier still at the harpsichord or spinet), who followed from the score, occasionally joining in on the piano, while the first violin or leader gave the tempi, or beat time, with his bow, if the instrumentalists faltered or failed to keep strictly together. The baton was used in Germany very soon after 1800. Godfrey Weber pleaded for its introduction in 1807, but musicians scoffed at the idea. Mosel brought it to Vienna in 1812. Karl Maria von Weber used it in Dresden in 1817. In 1820, at a Philharmonic concert in London, Spohr electrified his audience by forsaking his piano and standing with his face toward the orchestra and his score in front of him on a desk, beating time with his baton from beginning to end of the concert. This was found so successful a method that it was at once adopted in England.

The final seal was placed upon the modern orchestra by the invention, about 1815, of the piston or valve system for brass-wind instruments, by Stölzel and Blümel, both natives of Silesia. Ingenuity had been at work in all directions to provide a new and satisfactory bass for the wind contingent. The ophicleide or keyed serpent and the various other allied keyed brass instruments comprised under the general but misleading term of "bass horns" were tolerated for want of better. The results of the invention were instantaneous and far-reaching, and instrument-makers of all countries vied with each other in making use of this invaluable contrivance and in bringing it to mechanical perfection. Before long the orchestra was enriched by the family of brass valve instruments of large caliber known as tubas or bombardons and euphoniums, having throughout their compass a chromatic scale and a full sonorous tone of great beauty and immense power, and providing the long-desired bass for the orchestra and military band.

For summing up and presenting a concise description of the modern orchestra as now usually constituted and disposed, we are permitted to make use of the following extract from an article in that excellent work "The Musical Guide":

"The orchestra as now constituted is practically that of Beethoven. As ordinarily distributed it is composed of a piccolo, 2 flutes, 2 oboes, 2 clarinets, 2 bassoons, 4 horns, 2 trumpets, 3 trombones, 2 kettledrums, first and second violins, violas, cellos, and basses. The wood-wind instruments are now frequently used in triplets instead of pairs, and the whole wind choir is extended at will by the use of the English horn, the bass clarinet, the tuba, the saxophone, or other less common instruments. The harp is also employed at times.

"Orchestration, the art of writing for orchestra, has developed rapidly in recent years, yet the fundamental principles are those which guided Mozart and Beethoven. The modern efforts have been in the direction of increased sonority and richness of color. These ends are obtained by writing for a larger number of instruments and by dividing the old ones into a greater number of parts. The orchestra naturally separates itself into three groups of melodic instruments and one of merely rhythmic ones. The first three groups are the wood-wind, the brass, and the strings, and the other is the 'battery,' as the group of percussive instruments is called. In this last group only the kettledrums have musical pitch, except when bells are employed.

"The wood-wind is divided into flutes, which have no reed mouthpieces; oboes and bassoons, which have mouthpieces with two vibrating reeds; and clarinets, which have mouthpieces with one reed. Flutes used in triplets are capable of independent harmony, but all of a high pitch. Bassoons are the basses of the oboe family, and hence with two oboes and two bassoons composers can write in full four-part harmony for this class of reed instruments, and let them play by themselves when their peculiar thin, reedy quality is desired. The English horn, the alto of the oboe, can be used as another part. Clarinets have a compass extending through the alto and soprano ranges of the human voice, while the bass clarinet covers the tenor

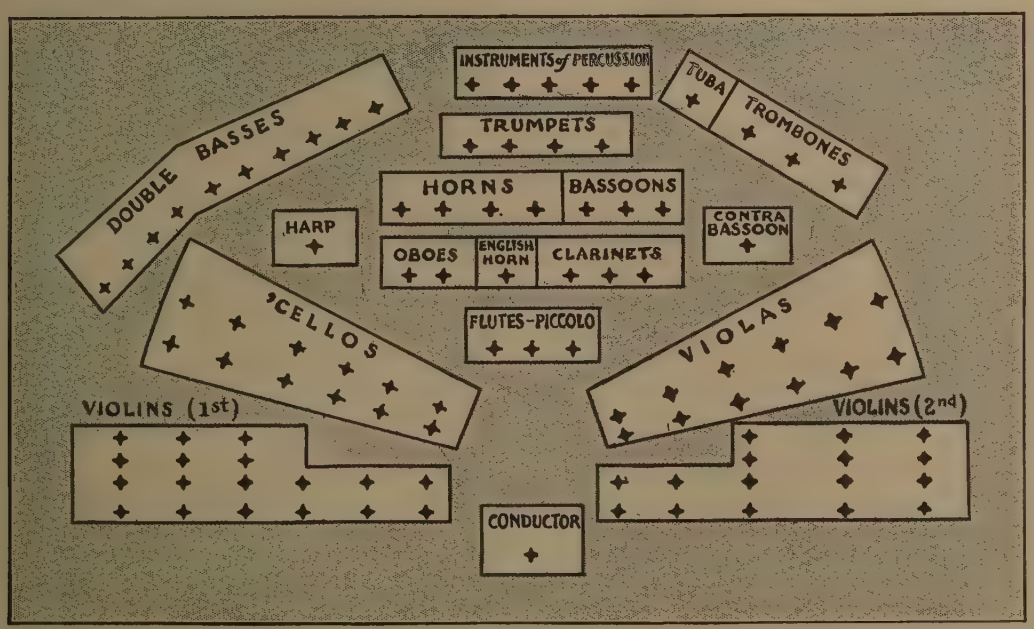
and the bass. Here again the composer can get a full harmony in one family of wood. Thus the wood alone offers three distinct orchestral tints. But the instruments of the different families combine to make new tints. Flutes go well with clarinets or oboes, and clarinets combine admirably with bassoons. Furthermore, the whole wood-band can be used at once with fine effect. The older composers had conventional methods of writing for these instruments, almost always allotting the same parts of the harmony to the same instruments. The moderns have learned to vary this practice with excellent results. All the wood-wind instruments can be used profitably as solo voices.

"The brass offers three groups, horns, trumpets, and trombones, each of which is capable of independent harmony, while each may be combined with the other, or with any part of another, to make variety of effects. All are useful for solo effects, the horn being especially good for this purpose. The brass can also be used in many combinations with the wood-wind. Horns, clarinets, and bassoons, for example, are frequently combined. The foundation of the orchestra, however, is the string quartet, as it is called, though it is really a quintet. Violins supply the soprano and alto parts of the harmony, violas part of the alto and all of the tenor; cellos run from bass up to low soprano, and basses give the deepest notes. The older composers made but poor use of the viola and the cello, but the moderns take every advantage of their compass and their individuality of timbre. Furthermore, the moderns subdivide the strings very often, writing at times for first and second violins in as many as six parts, for violas in two parts, and cellos in the same way. In this way the harmony becomes many-voiced and extremely rich."

The following table contains a comparative list of the principal instruments employed in recent years in some of the leading orchestras of the world:

	Gewandhaus, Leipzig	Philharmonic, Vienna	Philharmonic, London	Philharmonic, New York	Boston Symphony, Boston	Conservatoire, Paris	Crystal Palace, London	Bayreuth Festival (1876)	N.Y. Festival, Theo. Thomas (1882)	Handel Festival, London (1885)
Flutes	2	2	2	3	3	4	2	3	6	8
Piccolos	—	1	1	1	1	1	1	1	2	6
Oboes	2	2	2	3	3	2	2	3	7	8
English horns	1	1	1	1	1	—	1	1	2	—
Clarinets	2	2	2	3	3	2	2	3	6	8
Bassoons	2	2	2	3	3	4	2	3	6	8
Double bassoons	1	1	1	1	2	1	1	1	2	2
Horns	4	4	4	4	8	4	4	8	11	12
Trumpets	2	4	4	3	4	2	2	3	14	6
Trombones and tubas	4	4	4	4	4	4	4	9	12	12
Harps	1	2	1	1	1	1	1	6	6	—
Violins (First)	14	20	14	20	16	15	14	16	50	92
Violins (Second)	14	20	12	16	14	14	14	16	50	85
Violas	9	6	10	14	10	10	10	12	36	57
Celli	12	12	10	14	10	12	10	12	36	58
Basses	6	10	8	14	8	9	10	8	40	48
Bass clarinet	1	—	—	—	1	—	—	—	—	—

The accompanying diagram shows the usual distribution of the orchestra at the present day.



FIRST SECTION

WIND INSTRUMENTS

I. CLASSIFICATION

THE instruments of the orchestra may be divided into three sections:

STRINGS WIND PERCUSSION

It has been thought best to begin by describing wind instruments, for the reason that they are less generally understood than are those comprised within the term "strings."

WOOD-WIND

(*a*) *Without Reeds:* The Flute, the Piccolo.
(*b*) *With Double Reeds:*
The Oboe, Cor Anglais, Bassoon, Double Bassoon, or Contrabassoon, also the Heckelphone, or Barytone Oboe.
(*c*) *With Single Reeds:*
Clarinet, Basset Horn (Tenor Clarinet), Bass Clarinet, Pedal Clarinet, Saxophone (classed with the clarinet, although made of metal, on account of the single-reed mouthpiece).

BRASS-WIND

(*a*) *With funnel-shaped mouthpiece:*
French Horn, Wagner Tubas.
(*b*) *With cup-shaped mouthpiece:*
Trombone, Trumpet, Tubas, Saxhorns, Ophicleide, Doublophone, Cornet.

Wind instruments were used before and during Bach and Handel's time almost exclusively to double the value of the strings in unison; their independent use in orchestras dates from the beginning of the eighteenth century. The position of wind instruments has gained, and is still gaining enormously in importance; there have been more deviations from the old accepted paths of instrumentation with regard to wind instruments than to any other. Berlioz and Wagner treated them in a specially novel and revolutionary way, calling forth much adverse criticism and hostility. This large class of instruments is divided and subdivided many times, and it may help amateurs in recognizing and remembering their characteristics to mention a few of their chief differences.

The Wood-Wind, besides being classed as above, according to their mouthpieces, may be further divided thus:

(*a*) Instruments with conical bore, such as the oboe family and the saxophone (in brass-wind, the French horn, the tubas, ophicleide).

(*b*) Instruments with cylindrical bore, such as the clarinet family, the flute (in brass-wind, the trombone, trumpet, cornet).

The Brass-Wind, besides being classed as above according to their mouthpieces, may be further divided thus:

(*a*) Tubes of fixed length, ex.: natural trumpet, natural French horn.

(*b*) Tubes whose length is varied by means of a slide, ex.: slide-trumpet, slide-trombone.

(*c*) Tubes whose length is varied by means of lateral holes, ex.: keyed bugle, ophicleide.

(*d*) Tubes whose length is varied by means of valves, ex.: cornet, tubas, French horns.

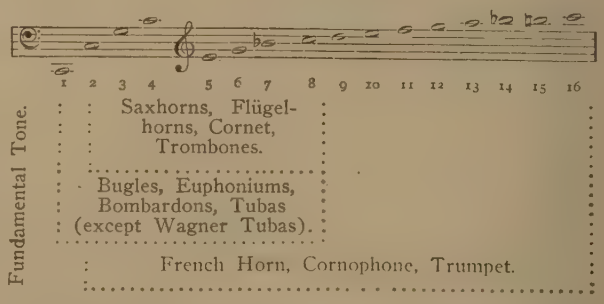
The Brass-Wind may again be subdivided in the following manner according to the harmonics given out by the tubes:

(*aa*) Those which give out all the harmonics up to the 16th, such as the French horn and the trumpet.

(*bb*) Those which give out harmonics from the 2d to the 8th without the fundamental tone, such as the cornet.

(*cc*) Those which give out the fundamental tone and the harmonics up to the 8th, such as the euphonium, trombone, and tubas.

HARMONIC SERIES


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Fundamental Tone.
Saxhorns, Flügelhorns, Cornet, Trombones.
Bugles, Euphoniums, Bombardons, Tubas (except Wagner Tubas).
French Horn, Cornophone, Trumpet.

NOTE.—In the "History of Music" in this series, together with the historical accounts in the following pages, primitive and ancient instruments are sufficiently described.

II. WOOD-WIND

THE FLUTE IN C (ALSO CALLED IN D)

(Transverse Flute)

French, Flûte (traversière).
German, Flöte (Querflöte).
Italian, Flauto (traverso).

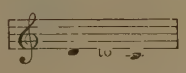
THE flute belongs to the class of wood-wind instruments without reeds.

Construction.—The flute consists of a tube open at the lower end and nominally closed at the upper, beyond the embouchure or mouth-hole, by means of a conical cork stop. In flutes made after Boehm's system the tube has now, instead of the old conical bore, a cylindrical one, terminating in a head with a parabolic curve. This tube consists of three joints:

1. The head, plugged at the upper end and containing, at about the third of its length, the orifice called embouchure, across which the performer directs the breath obliquely with the lips without closing it.

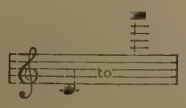
2. The body, containing the holes and keys necessary to produce the scale which gave the flute its old designation of D flute. The head and body together should theoretically give the fundamental note D, the six finger-holes being closed, and this is actually the case in the piccolo which is built without the foot; but mechanical exigencies connected with the addition of this joint render it impossible to preserve the original length of the body, so that the D is now produced through the second open key in the foot instead of being given out by the end of the tube formed by body and head together.

3. The foot, containing the additional keys necessary for extending the compass from



Flutes are made of various materials, wood (cocus), silver, gold and ebonite. The cone flute with open finger-holes has now been mainly superseded by flutes constructed on the Boehm system.

Production of Sound.—The flute is held transversely, with the embouchure turned slightly outward, so that the player's breath strikes the sharp outer edge of the orifice, setting up a flutter which reacts upon the stationary column of air within the flute, thus generating the sound-waves. There are sufficient holes and keys on the flute to produce all the chromatic semitones of the first octave. The next two octaves are obtained through the same holes by overblowing, i.e., by increased breath-pressure and a change in the position of the lips whereby the notes of the fundamental octave are reproduced an octave, a twelfth, or a double octave higher, aided by various devices for facilitating the production of these harmonic overtones.

Compass.—The compass of the newest C flutes is three octaves, with chromatic semitones from

The treble clef is used in notation.

The flute is a non-transposing instrument, the music being played as written.

Quality of Tone.—The peculiar timbre of the flute is characterized by a slight hollowness which may be accounted for by the paucity of upper partials present in the clang, for which, it is thought, the construction and proportions of the interior of the head may be responsible. The tone differs greatly in the three registers of the flute; the lowest being sonorous; the medium, sweet and elegiac; the highest, birdlike and brilliant.

Possibilities.—It is possible to play on the flute sustained notes, diminuendo and crescendo; diatonic and chromatic scales and arpeggios, both legato and staccato; leaps, turns, trills, etc. By the articulation with the tongue of the syllables "te-ke" or "ti-ke" quickly repeated, for groups of two or four notes, and of "te-ke-ti" for triplets, an easy, quick staccato, useful in accompaniments, is produced. This is called double or triple tonguing. Two or three flutes are used in large orchestras in harmony or unison, and one of the flute-players takes the piccolo when necessary.

Origin.—The flute is one of the most ancient instruments. The Egyptians had a long flute, held transversely, and of such length that the player's arms were stretched out to their full extent downward. This flute, known as the nay, was used without embouchure by blowing across the open end of the pipe. Eight persons are represented playing these nays on a tomb at Gizeh. Double pipes are seen repeatedly on their monuments; they were played with reed mouthpieces and were therefore oboes or clarinets, not flutes.

The Greek aulos and the Roman tibia were also pipes played by means of a double or a single reed mouthpiece and were therefore prototypes of the oboe or clarinet, and not flutes. The Etruscans, before the Romans, used the aulos as their chief instrument, both in its single and double form, and it is represented in mural decorations and on their beautiful vases. It is doubtful whether the Greeks used the flute proper, as did the Egyptians. We do not know exactly how the flute passed from the older civilizations to the newer in Europe; it was probably made known by the Moors or the crusaders. During the Middle Ages the flute seems to have been more fully developed in Germany than elsewhere. It existed in two forms: the direct or vertical like the recorder and the flageolet, instruments which are no longer in use in orchestras, and the German or transverse flute, which superseded the other form.

Bach gave the flute great prominence in obbligato and concerted passages, and since then it has been a favorite with all the great masters. Beethoven and Mendelssohn assigned to it the leading part for wind instruments. The flute generally plays with the violin, sustains notes with other wind instruments, or carries on conversations with the oboe and clarinet families, as in the grand symphony in C major by Schubert.

The most voluminous writer for the flute was probably Quantz, who composed 200 solos and 300 concertos for Frederick the Great alone. In Kuhlau the flute found its special exponent. This eminent contrapuntist devoted nearly the whole of his short professional life to compositions for this instrument.

III. WOOD-WIND

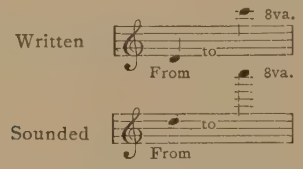
THE PICCOLO OR OCTAVE FLUTE

French, Petite Flûte Octave. *German,* Pickelflöte.
Italian, Flauto Piccolo, or Ottavino.

THE piccolo, which belongs to the wood-wind class of instruments without reeds, is really only a flute on a small scale, having half the dimensions of the large concert flute. Its principle of construction is the same, and so is the method of producing the sound.

Compass.—It is called octave flute because its compass lies an octave higher than that of the concert flute, and the music for it is written an octave lower than the real sounds to avoid using so many leger lines. The piccolo does not contain the additional tail-piece with the extra low keys which extend the compass of the flute.

Compass.—The compass extends, with all chromatic intervals:



Quality of Tone.—The notes at both extremes are not much used; the lower, because their tone is weak and ineffective, the upper, because of their extreme shrillness, and of the difficulty of playing them anything but fortissimo.

This instrument, except for a few harmonics on the violin, is the acutest in pitch in the orchestra. The medium register is the most used; its tone is clear and sharp. The piccolo has been found of the greatest value in imitative music, to depict the whistling of the wind in storms, as in Beethoven's "Pastoral" symphony, Wagner's "Flying Dutchman," and in conjunction with the violins in tremolo to depict the rustling of leaves in the breeze, as in the beautiful "Waldweben" in "Siegfried" and "Götterdämmerung." Verdi, in his "Falstaff," has shown that it can become a powerful comic agent, helping to reflect in the orchestral music the humorous situations of the drama. It is always used in bacchanalian music, and in any scenes of wild and frenzied gaiety. Berlioz had a great penchant for the piccolo. An exhaustive description of it may be found in his "Treatise on Instrumentation."

The piccolo is used singly in orchestras, and is generally played by one of the flautists.

IV. WOOD-WIND

THE OBOE
(The Shawm)

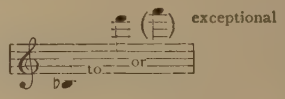
French, Hautbois. *German,* Hoboe. *Italian,* Oboe.

THE oboe is an elaborate and complicated instrument of the double-reed wood-wind class.

Construction.—It is composed of a wooden tube with conical bore, widening out to form a small bell, and having at the opposite end a short metal tube, to which are bound by silk the two thin pieces of cane forming the mouthpiece. Into this the player breathes gently. As he is obliged to loosen the lips from the mouthpiece to breathe out the superfluous air, he cannot execute very long passages without pauses.

Production of Sound.—The notes are produced by holes, some open, others closed by keys raised by means of levers. The newest models possess three or four alternative fingerings for certain awkward notes, which reduces the difficulty in fingering inconvenient passages. It is to Barret we owe the greatest improvements in this instrument. The oboe, like the flute, is an octave instrument, that is to say it overblows the octave. The oboe possesses notes sufficient for an octave or more with chromatic intervals. The next octaves are obtained by means of cross fingering and of the octave keys, which do not give out an independent note of their own, but determine a node in the column of air, and so raise the pitch of any other note played an octave.

Compass.—The compass of the oboe is from



The treble clef is used in notation.

The oboe is a non-transposing instrument which sounds the real notes written.

Quality of Tone.—If the reader wishes to distinguish the oboe speaking in the orchestra, let him bear in mind the quality of the bagpipe or musette; that will assist him in hearing the oboe. The quality of the tone is very penetrating (it can be distinctly singled out in a full orchestra playing forte) and rather shrill in the upper register, the lower being sweeter and more like that of the cor anglais, though thin. The quality does not otherwise vary much in the different registers. On account of this want of variety in tone and color, it is not a favorite solo instrument. In the orchestra, it is invaluable as a melody-leading instrument, balanced by clarinets and flutes. It is especially suitable for pastoral music, or the expression of sadness.

Possibilities.—It is possible to play on this instrument diatonic and chromatic scale and arpeggio passages, legato and staccato; leaps (staccato only); cantabile passages, sustained notes, diminuendo and crescendo; grace notes and trills (with reservations). Keys with many flats are the most difficult for the oboe-player. As the oboe-player gives forth his breath very slowly, long passages on the instrument are very exhausting.

Origin.—The oboe is of very ancient origin; it is derived from the instruments called, at various times, shawm, shalm, shalmey, chalumeau (from the Latin *calamus,* a pipe), with the bombard and pommer as tenor and bass. The descant shawm became the oboe, the transformation taking place during the seventeenth century in France. The archetype of the oboe has been found depicted in sculpture and painting in Egypt and Greece, and specimens have been discovered in tombs and mummy-cases with straws or reeds by their side, which were evidently intended for mouthpieces.

The Greek aulos and Roman tibia were prototypes of the oboe.

There are generally two or three oboes in an orchestra, and they play either in parts or in unison. Oboes were first used in military bands before being used in churches or for secular music, and their name, hautbois, indicates that they were the trebles of the wood-wind. The oboe assumed its present shape early in the seventeenth century.

V. WOOD-WIND

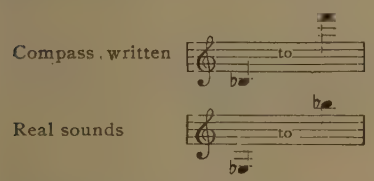
COR ANGLAIS OR ENGLISH HORN

German, Englisches Horn. *Italian,* Corno Inglese.

THIS instrument, which is better known by its French than by its English name, is not a horn, but a double-reed wood-wind instrument of the oboe family, of which it is the tenor; it bears the same relation to the oboe as the basset horn does to the clarinet.

Construction.—The cor anglais differs slightly from the oboe, in that it is longer by half, has a larger globular bell, and the wooden tube with conical bore is furnished with a bent crook, holding the mouthpiece. The fingering and the method of producing the sound are so similar to those of the oboe that the player of the one can in a short time master the other.

Compass.—The compass and clef are the same as for the oboe, but the cor anglais is pitched a fifth lower, being tuned to F. It is a transposing instrument, the music for it being written in a key a fifth higher than that of the composition. For example: a piece in A major would have to be written in E major for the English horn.



The treble clef is used in notation.

Quality of Tone.—The tone of the cor anglais is of the same penetrating quality as that of the oboe; the pitch is lower, but the tone sweeter and more masculine and melancholy, and often sounds like a wail. If the reader will bear in mind the quality of tone of a deep musette, it will assist him in distinguishing the English horn in the orchestra. This instrument, on account of its peculiar sweetness, is very suitable for pastoral music, and for expressing longing and tenderness, regrets or sweet memories, as in "Tristan und Isolde," in which opera it is extensively used. Wagner, however, not entirely satisfied with the cor anglais for representing the natural pipe of the peasant, caused an instrument to be made specially for him, which he called "Holztrompete," or wooden trumpet. This instrument resembles the cor anglais in form, being a wooden conical tube with a small globular bell. It differs, however, in that it has neither holes nor keys, only one piston placed at a third of the distance between the mouthpiece and bell. It is played through a cup-shaped mouthpiece by overblowing, that is to say, that by the varied tension of the lips, and pressure of breath, the upper partials from the 4th to the 12th are produced. This instrument is in C, and is non-transposing.

Possibilities.—It is possible to play the same kind of music on the cor anglais as on the oboe, but the peculiar timbre of the instrument renders florid music quite unsuitable to it. Keys with many sharps or flats are the most difficult for the English horn.

Origin.—Cor anglais is a misnomer, for it is not a horn. It may have been derived from the old English shepherd's horn, which was a similar but more primitive instrument, made of wood. This instrument was sometimes found bent at an obtuse angle in the middle of the tube. The instrument is always made straight now. Like the oboe, it is a very ancient instrument, developed from the shawm through the family of pommers, of which the alto was the immediate forerunner of the cor anglais. The exact date at which the cor anglais assumed its present form is unknown; it was presumably in the seventeenth century, at the same time as the oboe.

Gluck was the first to introduce it into the orchestra in his opera "Alceste" in 1767, unless Bach's "oboe da caccia" can be identified as the cor anglais. This instrument was ignored entirely by Beethoven,* Mozart, and Weber, but modern composers, Berlioz, Meyerbeer, Rossini, and especially Wagner, have fully appreciated its value.

VI. WOOD-WIND

THE BASSOON

French, Basson. *German,* Fagott. *Italian,* Fagotto.

THE bassoon belongs, like the oboe, of which it is the bass, to the class of wood-wind instruments with a double-reed mouthpiece.

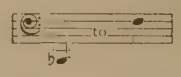
Construction.—The bassoon resembles a bundle of sticks; hence its name in German and Italian; whereas the French and English names refer to its pitch, which is an octave lower than that of the oboe. It consists of five pieces, which, when fitted together, form a wooden tube about seven feet long, with a conical bore. This tube is doubled back upon itself, the shorter joint reaching to about two-thirds of the longer, which reduces the height of the instrument to about four feet. The five pieces are the bell, and the long joint forming the upper part of the instrument when played (though its notes are the lowest in pitch), the wing overlapping the long joint, to which is attached the crook, a narrow metal tube, curved, and about twelve inches long, to which is attached the double reed forming the mouthpiece; lastly, there is the butt, which is the lower end of the instrument (when it is being played). This butt-joint contains the double bore necessitated by the abrupt bend of the

* Beethoven's trio for cor anglais and two oboes was probably intended for oboe d'amore, or oboe da caccia. The oboe d'amore, which is an oboe of deeper pitch, has been prominently used by Richard Strauss in his "Sinfonia Domestica," and the Heckelphone, which is a barytone oboe (an octave deeper than the oboe), has been employed by the same composer in his "Salome."

tube upon itself: both bores are pierced in one block of wood.

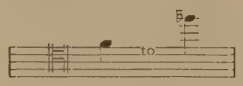
Production of Sound.—The instrument is held in a diagonal position by the player, the lower part of the tube, played by the right hand, resting against his right leg and the little bell turned upward in front of his left shoulder. The notes are produced by holes and keys similar to those of the oboe. The mechanism and the fingering of the bassoon are very intricate.

From B flat to F



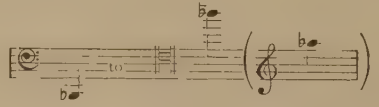
These notes are produced by means the keys only; the next octave from

is obtained by overblowing the notes of the previous octave an octave higher, and from

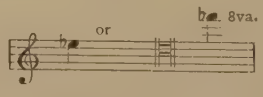


the notes are produced by overblowing the first or fundamental notes a 12th.

The power of obtaining a clear intonation depends a great deal on the correctness of the performer's ear; the bassoon and the trombone are the only instruments which resemble the strings in this particular. Bassoons by old makers, Savary in particular, are generally considered preferable to those of modern makers, as none of the attempts to improve or simplify this complicated and difficult instrument have proved successful. It is the only reed of which this can be said.

Compass.—The bassoon is an instrument reaching from B flat bass to A flat treble; its pitch lies two octaves below that of the oboe.

In notation, the bass and tenor clefs are used. The bassoon is not a transposing instrument—the music is written as sounded.

Quality of Tone.—The tone varies greatly in the different registers, being hard and thick in the lowest, sonorous and sweet in the medium, and somewhat agonized in the upper register. The newest models have small harmonic holes near the crook, which en-



able the player to extend the compass to E flat in the treble. These notes are called "vox humana" from their resemblance to the voice; they greatly resemble those of the middle register of the cor anglais. The timbre of this instrument is similar to that of the cello, but more nasal and less penetrating.

Possibilities.—It is possible to play diatonic and chromatic scale and arpeggio passages, both legato and staccato, provided the tempo be not too quick and that the signature do not contain too many sharps or flats; sustained notes, crescendo and diminuendo; grace notes, etc.

The bassoon has been greatly valued in orchestras for two centuries or more; at first only as a bass instrument, but now as a tenor, or even alto occasionally. There are usually two bassoons, sometimes three, in the orchestra, and they play in parts or in unison. Haydn intrusted solo melody passages to it, as in the Minuet of the "Military" symphony, and gave it great prominence in his orchestral works; as did Beethoven, Mozart, and even Bach; indeed, it seems a favorite with all the great masters. Handel made a fine use of it in "Saul" in the scene with the witch of Endor, and in "Alexander's Feast" in the aria "Revenge, Timotheus cries." It is this instrument which is made by Mendelssohn, in the overture to "Midsummer Night's Dream," to represent the braying of the ass.

Origin.—This instrument, like the oboe, is thought to be of great antiquity in origin, its prototype being the shalmey or shawm; but in its present form it is said to have been discovered by Afranio of Ferrara, in the middle of the sixteenth century. The immediate forerunners of the bassoon, the pommers, brummers, bombards, as they were variously called, were already in use early in the sixteenth century—some time before Afranio's discovery, when there was a complete quartet of them. They consisted of a conical tube of wood, with a bell at one end and a bent metal tube at the other end, with a double-reed mouthpiece. The pommers were straight like oboes, and had pegs, which, when removed, altered the key of the instrument. This device would not be of much use in our modern music with its many modulations and abrupt transitions of keys.

The bassoon corresponds to the cello in strings, the bass clarinet in single reeds, and the bass tuba in brass-wind instruments. The French have a smaller bassoon, a fifth higher than the usual one, and called by them the basson quinte. It is a transposing instrument, sounding a fifth above the written notes.

VII. WOOD-WIND

THE DOUBLE BASSOON

French, Contrebasson. *German,* Contrafagott. *Italian,* Contrafagotto.

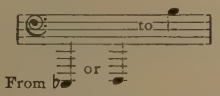
AS its name indicates, this instrument is the contra of the bassoon, and belongs to the double-reed wood-wind class.

Construction.—There are two chief makes: 1. The Belgian, chiefly used in French-speaking countries, consisting of a conical-shaped metal tube, with a large bell. It rather resembles the bombardon in outline than the bassoon. The tone of this instrument is naturally not the true bassoon tone merely extended in its lower register, for the brass tube slightly increases the hardness and roughness of tone, unavoidable in any case. 2. The German Contrafagott (of which there are sev-

eral models, Heckel's being the best known at the present time), which is more like the bassoon, consists of a wooden tube 16 feet 4 inches long, with conical bore doubled back four times on itself to make it less unwieldy. It terminates in a bell about four inches in diameter, and has a crook about two feet long, formed of a small brass tube with very narrow bore, to which is bound the double-reed mouthpiece.

Production of Sound.—The notes are formed through holes fitted with keys raised by levers, as in the bassoon; but the fingering of the double bassoon is by no means so complicated.

Compass.—The pitch of this instrument is an octave below that of the bassoon, and three octaves below that of the oboe; the compass extends from 16-foot C to middle C.



The notes of both extremes are difficult to produce. The bass clef is used in notation. Though the instrument is not really a transposing one, the music is always written an octave higher than the true sound to avoid using too many leger lines.

Quality of Tone.—The tone is rough and a little rattling in the lowest register, but in the medium and upper, more like that of the bassoon; its volume of sound is not quite adequate to the depth of pitch, which might be expected to be the case, seeing the comparative smallness of the mouthpiece. It forms a splendid bass when united with the contrabasses.

Possibilities.—The double bassoon possesses every chromatic semitone throughout its whole compass, and can therefore play with facility in any key. Quick passages are neither easy to play, nor would they be effective, for this is essentially a slow-speaking instrument. The lowest notes are very difficult to produce, and almost impossible to play piano; but the instrument forms a grand bass to the reed family, and supplies the four notes missing in the double bass to reach 16-foot C.

Origin.—The double bassoon traces its origin back to remote ages, like the rest of the reed family: its immediate forerunner was the shalmey or pommer family. (See Oboe, *Origin.*) The exact time when this instrument took its present form is wrapped in obscurity, but we may safely assume it to be at a time subsequent to that at which the oboe became known as such, that is to say, during the first half of the seventeenth century. We know that Handel first introduced it in the coronation anthems in honor of George II, and that it was in use in military bands before it was introduced into the orchestra. Owing to its faulty construction and weak, rattling tone, it fell into disuse in spite of the fact that the great masters Haydn, Mozart, Beethoven scored for it abundantly. It is now much used again in modern scores. Beethoven has scored for the double bassoon in the C minor and the Ninth symphonies, and has even written an obbligato passage for it in "Fidelio." The double bassoon corresponds to the double bass in strings; in brass-wind, to the contrabass tuba; and in single reeds, to the pedal clarinet.

VIII. WOOD-WIND

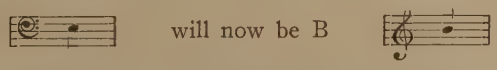
THE CLARINET OR CLARIONET

French, Clarinette. *German,* Klarinette.
Italian, Clarinetto.

THIS instrument presents a variety of interesting and important features.

Construction.—The clarinet is a single-reed woodwind instrument, composed of a cylindrical tube of wood (generally cocus), terminating in a small bell. The beak-shaped mouthpiece of wood or ebonite (the latter substance does not crack or suffer from moisture) fits into a socket in the upper part of the tube. To this is bound by a ligature, adjusted by two screws, a thin and flattened piece of reed, which the player sets vibrating by blowing into the mouthpiece, thus producing the rich, mellow sounds peculiar to the clarinet family.

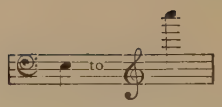
Production of Sound.—The notes are formed by means of nine open finger-holes and nine closed by keys raised by levers. These, with the bell, produce the nineteen semitones which constitute the fundamental scale of the clarinet; the rest of its compass is obtained by a key contrivance which, determining a node in the bore, raises the pitch of the instrument a twelfth. The fundamental bell-note, which in the C clarinet was E



and so on with each of the finger-holes.

The flute, oboe, and similar instruments give the octave, or first harmonic, when overblown, because they act like open pipes, which give the entire harmonic series. In the clarinets, however, the effect is that of a stopped pipe, closed at one end, because of the size and strength of the reed, which is said to "govern the tube." Stopped pipes give only half the harmonics (the second, fourth, sixth, etc.), thus causing a soft and mellow tone. In tubes, a node is the point where the air vibrates with constant pressure, as at the end of the tube or opposite an opened keyhole. In the oboe, in which the reed always vibrates with the air-column (the tube is said to govern the reed), the reed is at the point of maximum change in pressure, called the ventral segment. In the clarinet, however, the reed vibrates against the direction of the air-vibrations, as it vibrates only half as fast as the oboe reed in the same sized pipe. The clarinet reed merely doubles the same air-condition that comes up the tube to it, either condensation or rarefaction. Thus it has the effect of being halfway between the node and the proper position of the ventral segment. As no ventral segment can form at the reed of a clarinet, it follows that subdivision of the air-column into even fractions is impossible, and every other overtone of the series remains silent.

Compass.—The compass of the clarinet is three octaves and a sixth with chromatic intervals, from E to C; the treble clef is used in notation. Real sounds from

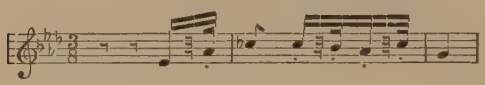


The lowest register is called chalumeau.

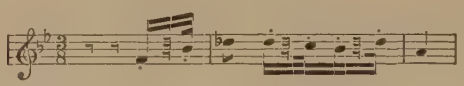
There are three principal treble clarinets, tuned to C, B flat, and A major, and as the fingering is the same for each, notes played on the B flat clarinet sound a tone lower, and on the A clarinet a minor third lower than the corresponding note on the C clarinet; it follows, therefore, that the music for the B flat clarinet must be written in a key a tone higher, and for the A clarinet a minor third higher than that employed in the composition. The clarinet is a transposing instrument. For example:

For the C clarinet or for the real sounds on the B flat and A clarinets:

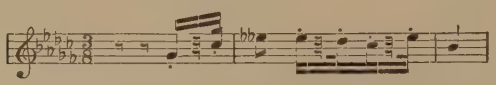
From Beethoven's Symphony, C minor. *Andante con moto.*



For the B flat clarinet written thus:



For the A clarinet written thus:



Quality of Tone.—The quality of tone of the three clarinets varies greatly; that of the C being shrill, hard, and less powerful than that of the other two; it is on that account little used, except for open-air music. The B flat clarinet is remarkable for great brilliancy and sonorousness, and is the most generally used, especially as solo instrument; the A clarinet is sweet and mellow. Composers take these differences of tone as well as those of pitch into consideration when writing for the instrument.

As in military bands the clarinets replace the violins, a smaller clarinet in E flat is used in addition, whose pitch is a minor third higher than that in C. There is also an A flat clarinet, transposing a sixth upward, which is used in some bands. Its tone is fiercely shrill, and it is only found in large military bands. The clarinet is much used for solo chamber and orchestral music; in the latter it very suitably carries on the melody, two or three clarinets being used sometimes in harmony, sometimes in unison.

Possibilities.—It is possible to play on this instrument sustained notes, diminuendo and crescendo; diatonic and chromatic scale and arpeggio passages, both in legato and staccato style; grace notes, trills, etc. Keys with not too many sharps or flats are the easiest for the clarinettist.

Origin.—The name of the instrument is derived from the Italian clarino; English, clarion (meaning trumpet). Its medieval prototype is probably, in common with all reed instruments, the shalmey or shawm. This was in its most primitive form a plain reed, called by the Romans calamus, which gave its name to the lowest register of the modern clarinet. Roman pifferari and Italian shepherds still use a similar reed-pipe or shalmey. But to see it in its most primitive form, one must seek it among the peasants of the lower Rhine, where the youths make it in the spring, of green reeds or soft bark. It possesses a soft dreamy tone, not unlike that of the chalumeau register of the modern clarinet. The clarinet has only been known as such since about 1690, when it is said to have been invented by Johann Denner, of Nuremberg.

Neither Bach nor Handel has scored for the clarinet (the latter tried it once); Mozart was the first to make any extensive use of it in an orchestra, as a melody-leading instrument. Beethoven, Schumann, and in our own time Wagner and Brahms, have made the greatest use of it. Weber and Mendelssohn were the first to discover the worth of what may be called the king of the wood-wind instruments. The use of the deepest (chalumeau) register was superbly employed by Weber in his Incantation scene in "Der Freischütz," and Mendelssohn's "Scotch" symphony was the first symphony in which all the beauties of the clarinet were revealed.

IX. WOOD-WIND

THE BASSET HORN

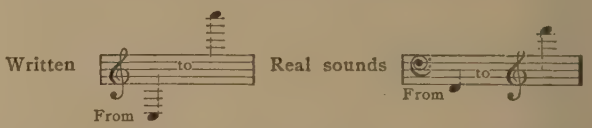
French, Cor de Bassette. *German,* Bassetthorn.
Italian, Corno di Bassetto.

THE basset horn is the tenor clarinet, and therefore belongs to the family of wood-wind single-reed instruments.

Construction.—It is composed of a cylindrical tube of wood with a cylindrical bore ending in a bell, larger than that of the clarinet; it is played through a beak-shaped mouthpiece containing a single reed. The basset horn has usually an angular bend in the middle, or it doubles upon itself like the bassoon, but with a larger bell, or the bell is turned upward in the contrary direction to the bend of the tube near the mouthpiece, like the bass clarinet.

Production of Sound.—The basset horn has the same fingering as the clarinet, but its pitch is a fifth lower than that of the C clarinet.

Compass.—The compass of this instrument is four octaves, from great F to F in the treble.



The basset horn is a transposing instrument, being in the key of F, and its music is written a fifth higher than the real sounds. The treble clef is used for all but the very lowest, for which the bass clef is used.

Possibilities.—These are the same as for the clarinet, except that the three or four lowest notes can only be intoned slowly and detached; the upper register, being better represented in the clarinet, is not much used.

Quality of Tone.—The quality of tone is extremely reedy, and rich in the low register, which is the most useful for orchestral purposes. It is especially effective in mournful music.

Origin.—The basset horn was invented by Horn, of Passau, in 1770; hence its name, which has nothing to do with the horn itself. In French the name has been translated into cor, while bassette is a diminutive of bass. The predecessors and the prototypes of the basset horn are respectively the pommers and the shalmeys, as of the clarinet. Mozart, Beethoven, and Mendelssohn have written a great deal of chamber and orchestral music for this instrument, and with modern masters its popularity is on the increase.

X. WOOD-WIND

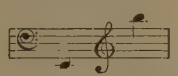
THE BASS CLARINET

French, Clarinette Basse. *German,* Bassklarinette.
Italian, Clarinetto Basso.

THE bass clarinet is practically the A, B flat, or C clarinet, speaking an octave lower, and what has been said of the fingering and transposing of the clarinet holds good with regard to this instrument.

Construction.—The form of the bass clarinet differs from that of the treble clarinet in that it has a large gloxinia-shaped bell doubled up on the front of the instrument; the tube at the other extremity is serpent-shaped, and to it the mouthpiece is bound by means of a strong ligature with screws.

Production of Sound.—The sound is produced in the same manner as for the clarinets. On account of the great length of the instrument, the holes lie very far apart, which would make the instrument a very difficult one to play, but for the clever arrangement of the keys on long rods. The first makers of the instrument, who did not understand key work, made many futile attempts to cope with this difficulty by making the bore serpentine, by boring holes obliquely, etc. The fingering is now like that of the higher clarinets.

Compass.—The compass of the bass clarinet is the same as that of the higher clarinets in C, B flat, and A, an octave lower, therefore, for the C bass clarinet, thus:

Both bass and treble clefs are used in notation; when the latter is the case, it must be understood that the notes sound for the B flat clarinet a major ninth below, for the A a minor tenth below the written notes; but when the bass clef is used, the transposition is only 1 tone and 1½ tones respectively. The B flat and A bass clarinets are the most used.

Quality of Tone.—The quality of tone is less reedy than that of the higher clarinets; it rather resembles the bourdon stop on the organ. The tone is hollow and wanting in power, in the lowest register particularly.

Possibilities.—The bass clarinet has the same possibilities as the treble clarinet, with the exception of the lowest octave, which is slow-speaking, and chiefly used for sustained bass or melody notes, for the volume of sound makes rapid passages impossible. It is especially effective in gloomy and somber music.

Origin.—The prototype of the bass clarinet is naturally the same as that of the clarinet, but the instrument in its present form (or nearly so) was invented in 1793, and the first instrument was made by Greser of Dresden. Halary and Adolphe Sax, of Paris, and Wieprecht, improved upon the original models in the first half of the last century, and through others the instrument has reached its present perfection.

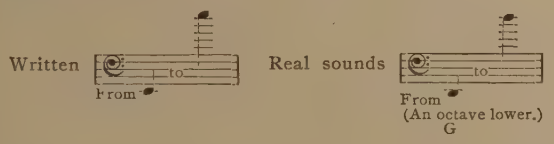
XI. WOOD-WIND

THE PEDAL CLARINET

THIS is a comparatively new instrument invented by M. F. Besson (patented in 1891), which completes the quartet of clarinets as the double bassoon completes that of the oboes.

Construction.—In principle of construction, this instrument resembles the clarinet; it consists of a tube ten feet long, an ingenious combination of cylindrical and conical bore, doubled up at the lower end, which terminates in a metal bell. The mouthpiece at the other end is exactly like that of the other clarinets, but of a larger size, and it turns at right angles to the body of the instrument; it is furnished with a single reed. On the tube are thirteen keys and two rings; the fingering being absolutely like that of the B flat clarinet except for the eight highest semitones.

Compass.—The normal compass of the pedal clarinet is as follows:



with an extended compass in the bass to B natural, which will shortly be made available for practical purposes.

This instrument is in B flat, two octaves below the B flat clarinet. As it is a transposing instrument, the music must be written for it in a key a tone higher; and to avoid using many leger lines, an octave higher besides. The bass or F clef is used in notation.

Quality of Tone.—The tone is rich, full, and powerful; the very lowest notes being unavoidably a little rough in quality, but much more sonorous than the corresponding notes on the double bassoon. The upper register resembles the chalumeau (lower) register of the B flat clarinet in quality.

The instrument has been used in American orchestral scores by C. M. Loeffler.

XII. A RELATIVE OF THE CLARINET

THE SAXOPHONE

French, Saxophone. *German,* Saxophon.
Italian, Sassofone.

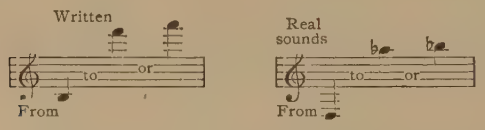
THE saxophone belongs to the clarinet family on account of its single-reed mouthpiece, but it cannot be classed as a wood-wind instrument, being made of brass.

Construction.—The saxophone resembles the bass and pedal clarinets at first sight; but its tube is conical,

whereas that of all clarinets is cylindrical (except for the bell-joint in the bass and pedal models). The saxophone, then, consists of a wide-bore conical brass tube, doubled up near the bell, which is shaped somewhat like a gloxinia flower. The mouthpiece end is bent at right angles.

Production of Sound.—The saxophone has from eighteen to twenty keys; the fingering is similar to that of the flute and the oboe. The first fifteen semitones are obtained by opening successive keys, the rest of the compass by means of the octave keys. The saxophone may, therefore, be termed an octave instrument.

Compass.—The compass of the various saxophones extends over two octaves and a fifth, with all chromatic intervals. The chief saxophones are the soprano in B flat; the alto in E flat; the tenor in B flat; and the bass in E flat or B flat. All these are transposing instruments, and the music for them has to be written in a correspondingly higher key; for instance, B flat being one tone below C (the standard for all transposing instruments), its music must be in a key one tone higher than that of the composition. As the alto in E flat is most used, its compass will be given here.



The treble or G clef is used for all instruments; the real sounds of the bass and contrabass saxophones being two octaves lower than the written notes.

Quality of Tone.—The tone is inferior to that of the clarinet in quality, and is something like that of the harmonium. Berlioz says that "it is soft and penetrating in the upper registers, full and rich in the lower, and in the medium profoundly expressive; it has vague analogies with the cello, clarinet, and cor anglais, with, however, a brazen tinge."

Possibilities.—It is possible to play on the saxophone sustained notes, crescendo and diminuendo; scale passages, diatonic and chromatic; and it is an easy instrument to play.

Origin.—The idea of using a single-reed mouthpiece, with a conical tube, is due to a clockmaker of Lisieux, Desfontenelles, who, in 1807, made a clarinet with a conical bore, and a bell turned vertically upward. In 1840 Adolphe Sax, in trying to produce a clarinet which would overblow an octave, like a flute, instead of a 12th, discovered the instrument which he named the saxophone. Modern French composers, Meyerbeer, Bizet, Massenet, and Ambroise Thomas among others, have scored for it in most of their works. Kastner introduced it into the orchestra in 1844, at Paris, in his opera "Le dernier roi de Juda." Its value as a solo instrument, supported by trombones or by the cor anglais, as in the ghost scene in Thomas's "Hamlet," is great; for it produces just the weird impression appropriate to the situation. The saxophone is greatly used in military bands in Belgium and France, where it has quite superseded the bassoon, and partly the clarinet.

XIII. BRASS-WIND

THE FRENCH HORN

French, Cor de Chasse. *German,* Waldhorn. *Italian,* Corno.

THE French horn belongs to the class of brass-wind instruments, of which it is one of the most characteristic and difficult to master.

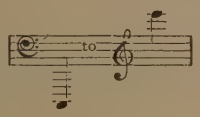
Construction.—The horn consists of three principal parts: 1. The body, seven feet four inches in length, a conical brass tube folded round spirally, and ending in a large wide-mouthed bell. 2. The crooks, interchangeable spiral tubes of different lengths, each altering the pitch and key of the instrument. When the longest crook, the B flat basso, is used, the inclusive length of the tubing is about seventeen feet. 3. The mouthpiece, made of brass or silver in the shape of a funnel (to which the horn chiefly owes its softness and richness of tone), quite unlike that of any other instrument in use in orchestras, except the cornophone and the Wagner tubas (included on account of their names with the other tubas). Across the ring formed by the body is a pair of slides, each shaped like a capital U, fitting tightly into each other, which are used to tune the instrument, and as a compensator with the crooks. The three valves or pistons which are now to be found on most horns are attached to these tuning slides and to the body, and have greatly lessened the enormous difficulties the horn-players experienced in obtaining notes all strictly in tune and of an even quality; particularly as the instrument is so susceptible to changes of temperature that a cold crook suddenly put on often causes the first few notes to be flat.

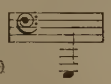
Production of Sound.—The natural or open notes on the horn are not formed by closing or opening finger-holes by means of keys, as in the clarinet, oboe, etc.; they entirely depend upon (1) the length of tube used (additional length producing deeper pitch), this length being varied by means of the crooks, which are named after the fundamental or prime notes they give out; (2) the tension of the muscles of the mouth and lips and the increased pressure of breath, by which means the upper partial harmonics of the prime note are produced—the greater the tension, the higher the harmonic—this method of producing notes being called overblowing;* (3) the valves mentioned above, which, when depressed by the fingers, produce supplementary notes by lowering the pitch of the instrument and of any crook in use at the same time—for the first valve 1 tone, for the second ½ tone, for the third 1½ tones. Two or more valves may also be used simultaneously to lower the pitch still further. These valve notes are almost equal in quality to the natural, particularly in the medium register. Another means of lowering the pitch of the horn a tone or a semitone respectively, is to insert the open hand right up the bore of the horn, or to insert it into the bell only; this method, which gives a muffled, veiled tone to the notes thus closed, is only used now when that peculiar baleful tone is required for effect. It was discovered in 1770 by Ham-

*A term now also applied to excessive blowing on brass instruments, producing an objectionable blare.

pel, a horn-player in Dresden, and is called bouché, or hand-stopping. The "stopped tone" of the horn is the most ugly and baleful tone of the orchestra. It is used to picture anything evil or criminal. Wagner uses it thus in the last act of "Tannhäuser," in "Götterdämmerung" at the murder of Siegfried, etc.

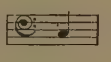
Compass.—The nominal compass of the horn with crooks is from 16-foot C

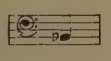
Actual sounds for C basso horn

but that low C, which is the real fundamental tone of the horn, can rarely be produced, and the effective register begins with 8-foot C.

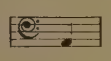
With three valves, therefore, the usual compass on the B flat bass might reach as low as

(Actual sounds)

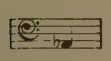
but the two or three notes of both extremities are seldom used. The music for the horn is usually written in C, the treble and the bass clefs being used in notation. The composers indicate the key or crook in which the horn is to play, but the performer often transposes for himself, when he can more easily produce by valves the open notes written for the old hand-horn.

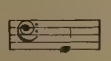
It is usually easier to produce low notes on the higher crooks and high notes on the lower crooks, but a great deal depends on the diameter of the mouthpiece used, and on the lip of the player. The chief crooks in use at present are eleven in number:

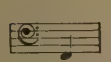
C alto  rarely used.

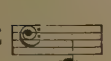
B flat alto  lowers the pitch 1 tone.

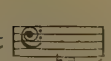
A  lowers the pitch 1½ tones.

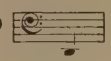
A flat  lowers the pitch 2 tones.

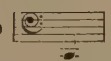
G  lowers the pitch 2½ tones.

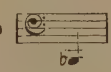
F  lowers the pitch 3½ tones.

E  lowers the pitch 4 tones.

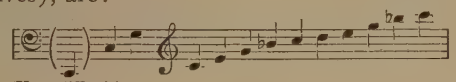
E flat  lowers the pitch 4½ tones.

D  lowers the pitch 5 tones.

C Basso lowers the pitch 6 tones (1 octave).

B Basso lowers the pitch 6½ tones.

B flat Basso lowers the pitch 7 tones.

The harmonic series on the horn, that is to say the open notes which are possible on each crook (without using the valves), are:

As written



(Very difficult)

The horn is a transposing instrument. As stated, its music is generally written in C, in which case the transposition is effected by the crooks. But as the F horn is considered the best, some composers always call for it, and write so as to bring it into the proper key. Thus, if it is written in C to sound in F, it would have to be written in D to sound in G, and so on.

Quality of Tone.—The timbre of the horn is mellow, sweet, and sonorous, having none of the vibrating, metallic sound of most other brass instruments with cup-shaped mouthpieces. The timbre of the piston notes is slightly different, being more resonant, partaking a little of the character of the trombone. For this reason both the natural and the valve horn are often found in the same orchestra, as a gain in tone-color results. Great masters in orchestration so choose the keys of the four or eight horns for which they are scoring as to use the greatest possible number of open notes, these being the most valuable. The horns generally play in pairs, the 1st and 3d, and the 2d and 4th; yet composers frequently use horns in four different keys.

Possibilities.—It is possible to play on this instrument sustained notes, diminuendo and crescendo; diatonic and chromatic scale and arpeggio passages, both legato and staccato; grace notes and trills; the latter are only advisable in the medium register.

Origin.—The horn is of very ancient origin. It was known in Egyptian, Assyrian, and Indian civilizations, and is to be found depicted in painting and sculpture on ancient temples, monuments, etc. The schofar of the Israelites was a "wether horn," as Rabbi Jehuda tells us in a treatise, and Rabbi Levi says, "It must be bent near the bell." This ancient instrument is still used in synagogues nowadays, at certain seasons of the year. The Roman buccina, or cornu, was a brass tube of great length, curved round spirally, like the modern helicon, but with a narrower bore, and worn like it round the performer's body; it gave the same harmonic series as the modern horn, and like it could not sound the fundamental tone on account of its small mouthpiece. Horns were, with other instruments, imported into Europe by the Moors and the

crusaders; of those horns, the oliphant, or "Roland's horn," was the most ancient. Specimens of this instrument from the fourteenth century are extant; but we know that the Franks were familiar with the horn before the battle of Roncesvalles, 778 A.D., for Roland blew mighty blasts upon it to call Charlemagne to his assistance. This primitive horn continued in use for hunting-calls, till it finally, in the seventeenth century, developed into a spirally bent brass tube with a large bell, and was worn round the body so as to leave the hands free. The natural horn was first introduced into an orchestra in England (under strong protest) in 1720; in France in 1757; and earlier in Germany, as Bach frequently scored for it. About 1815 pistons were invented in Prussia, and were speedily adapted to most brass instruments. Schumann was the first to introduce the valve-horn and valve-trumpet into the orchestra.

XIV. BRASS-WIND

THE TUBAS

French, Tubes. *German,* Tuben.

UNDER this name are comprised at the present day instruments of two distinct families: 1. The modern development of the bombardon and euphonium, which are really the bass saxhorns, having four or five pistons, of which one is set horizontally and the rest vertically in the instrument. In the older form of bombardon the pistons were all horizontally set. 2. The Wagner tubas—the tenor or tenor-bass scored for by him in his "Nibelungen Ring" and other dramas. These instruments belong, by their mouthpiece, to the horn family, and differ from the bass tubas or bombardons in that they are played with a funnel-shaped instead of a cup-shaped mouthpiece, which makes them really basses of the French horn.

The saxhorn family has a cup-shaped mouthpiece, producing a quality of tone between that of a horn and a trombone.

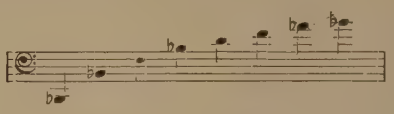
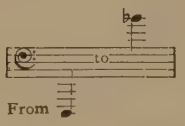
THE EUPHONIUM

French, Baryton. *German,* Tenortube.
Called in the orchestra, Tuba; in a band, Euphonium.

Construction.—This instrument consists of a wide-bore conical brass tube, ending in a wide-mouthed bell; it has a cup-shaped mouthpiece. Some euphoniums are made with four or five pistons; one horizontal and three or four vertical.

Production of Sound.—By the varied tension of the lips across the mouthpiece, as for the trumpet, trombone, etc., the harmonics or natural open notes are obtained by overblowing. The intervening notes are produced by means of the valves, which, by opening a passage into additional tubes, deepen the pitch 1, ½, 1½, 2½ tones, respectively; the horizontal valve, worked by the left hand, is used to make the lower notes strictly in tune, and opens a passage into a compensating tube.

Compass.—The bass or F clef is used in notation. The euphonium is treated by some composers as a transposing instrument, but usually the real notes are written. There are euphoniums in C and in B flat; the latter is the most used. This instrument gives out the fundamental tone readily, but no harmonics above the 8th, viz.:

Euphonium in B flat. Harmonic Series.

By means of all the valves used at once, the B an octave below can be reached, giving a compass of about four octaves.

Quality of Tone.—The quality of tone is rich, noble, and powerful, harmonizing well with that of the trombone, and speaking readily in the lower registers, but slowly of course, owing to the long dip of the pistons.

Possibilities.—It is possible to produce diatonic and chromatic scale passages, in moderate time; sustained notes, diminuendo and crescendo; legato and staccato effects. With the new short-action piston instruments, the dip of the piston being half that of the old instruments, rapid passages may be played as on the cornet.

Origin.—This instrument is of modern invention. It has sometimes been regarded as belonging to the saxhorn family of high-pitched tubas invented by Sax, from which, however, it differs by the proportions of the bore. Owing to the smaller caliber of the bore, the fundamental, together with the pedal notes obtainable by means of valves, cannot be produced for practical purposes on the saxhorns, whereas they are effective on the tubas.

The compass given above is the extreme theoretical one. In practice D or E flat is the lowest effective note on the four-valve B flat euphonium and E or F on the three-valve instrument. The prototype of this instrument is the keyed bugle, invented by Halliday in 1810. For this reason, it is only scored for by modern composers. In military bands it is a great favorite. The euphonium is the cello of the brasses, and blends equally well with reed or brass. It is too large an instrument to admit of tonguing. To it are given either a melody or a bass; sometimes a counterpoint subject with the bassoon and horn.

XV. BRASS-WIND

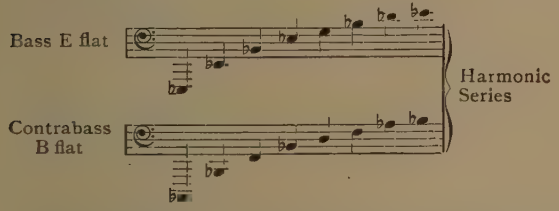
THE BASS TUBA

BOMBARDON

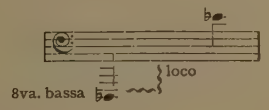
AMONG instruments of the trumpet family, the bass tubas hold an important place.

Construction.—The bombardon and its contrabass variety are constructed exactly like the euphonium (of which they are the basses), with four or five valves, lowering the pitch respectively 1, ½, 1½, 2½ tones, the fifth valve acting as a compensator to obtain the low

notes strictly in tune. The bass tuba gives out the same harmonic series as the euphonium, and is in E flat or F for the bass, and C or even B flat for the contrabass; that is, an octave below the euphonium. The deeper the pitch of these brass instruments, the longer and wider the conical tube of which they consist. The euphonium is 26½ inches high, with a bell measuring 9⅞ inches across; whereas the monster contrabass tuba is 40 inches high and its bell measures 16 inches across.

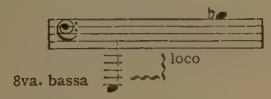
Compass.—The compass of the tubas is the largest low compass in the orchestra.

This compass is extended nearly an octave lower by using all four valves together. Higher harmonics are possible to a first-rate player with a good lip; the lower notes produced by the valves can hardly be heard unless doubled an octave higher by another tuba. A complete chromatic scale throughout its compass is to be obtained.

Compass of the bass tuba in E flat or F.



or higher still for first-rate player.

B flat



The bass clef is used in notation. These tubas are generally treated as non-transposing instruments, the music being written as sounded, except in France and Belgium, where the music for them is transposed.

Quality of Tone.—The tone is most sonorous, rich, and of immense power, partaking of that of the organ and trombone. The bass tuba corresponds to the double bass in strings, and to the pedal clarinet and double bassoon in reeds. A beautiful effect is produced by playing piano and pianissimo on this instrument. Wagner uses these instruments extensively in his dramas, in "The Ring" especially. The name of bombardon is still used now for the bass tuba in military bands. The older instrument of that name was made like a large tenor horn, but with a cup-shaped mouthpiece and a less expanded bell; the cylinders were also differently set, being all horizontal: the bell was to the left of the player, instead of to the right as in the newer models invented by Sax. The name of helicon is given to the bass or contrabass tuba in its circular form, worn round one shoulder, in military bands, which is a more convenient way of carrying the instrument when marching.

WAGNER TENOR AND TENOR-BASS TUBA

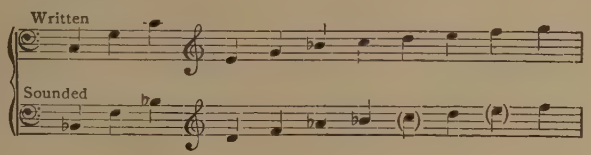
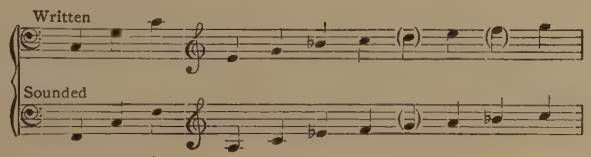
Construction.—This instrument belongs to the valve-horn family, of which it is the bass. It consists of a conical brass tube with a wider bore than the horn, and a wider-mouthed bell. This tube is not spirally bent, but more in the shape of the tenor horn, or of the euphonium with a horn, or funnel-shaped mouthpiece; and the bell to the right of the performer.

Production of Sound.—This tuba has four valves played with the left hand, which deepen the pitch for the bass tuba, respectively, 1, ½, 1½, and 2 tones, and for the tenor tuba, ½, 1, 1½, and 2 tones; which latter arrangement differs from that of all other valve systems. These valves help to form the intervening notes of the harmonic series, which lies between the 2d and 12th upper partials; the fundamental tone being very difficult, almost impossible, to produce. These open tones are produced by the varied tension of the lips across the mouthpiece, and by the pressure of breath called overblowing.

The tenor tuba is in B flat, and the bass in F, a fourth lower.

Compass.—This is a transposing instrument, and its music, like that of the horn, is always written in the key of C. The bass and treble clefs are used.

Harmonic Series or Open Notes (Wagner Tubas).

B flat Tenor

F Bass

The notes in curves are difficult to obtain strictly in tune as open notes. By means of the valves the compass is extended downward to

Real sound for the tenor in B flat,

and to for the bass in F,

with all chromatic intervals throughout the compass.

Quality of Tone.—The quality of tone of the tenor instrument is similar to that of the valve-horn, but more metallic and therefore less pure and noble. The tenor-bass or bass in F is of a fuller and richer tone than the former, but of the same timbre. Wagner, instead of relying upon an instrument of different timbre like the trombone or euphonium, had these horns constructed to complete the quartet of horns. The

euphonium, however, is often substituted for the one, or the tenor horn for the other.

Possibilities.—Sustained notes, diminuendo and crescendo; rhythmical figures, legato and staccato; arpeggios in moderate time, etc., are possible on this instrument.

XVI. BRASS-WIND

THE TROMBONE (SACKBUT)

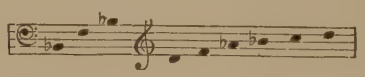
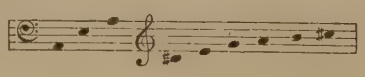
French, Trombone. *German,* Posaune.
Italian, Trombone.

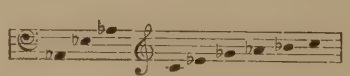
THE trombone belongs to the class of brass instruments with cup-shaped mouthpieces.

Construction.—This instrument consists of a tube doubled twice upon itself, with a wide bell at one end, and at the other a cup-shaped mouthpiece which varies in diameter according to the lip of the player (who chooses one to suit him), and the pitch of the instrument. The bore is cylindrical except for the bell-joint, in which it is conical. The tubes forming the middle section, or slide, are made double, and are connected at the lower end of a semicircular tube. The outer tube, therefore, slides upon the inner, opening a greater length of tube proportionate to the depth of pitch required. The slide is held by a little bar across the upper portion, and is manipulated by the right hand.

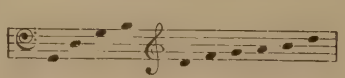
Production of Sound.—Notes are produced on the trombone, as on the horn, by overblowing; that is, by the varying tension of the lips and pressure of breath, which give the harmonic series as far as the eighth or tenth upper partial; the fundamental tone or pedal note is hard to obtain and ineffective (as in the French horn). There are seven positions of the slide on the trombone, each giving a fundamental tone and its harmonic series, a semitone lower than the last; these positions are made by pulling out the slide a little more for each one, the first position being that in which the slide remains closed. The performer on the trombone is just as dependent on a correct ear as the performer on stringed instruments is, for these positions are found by ear. Appended is a table of the harmonics in general use for the seven positions, and the reader will perceive that a complete chromatic scale can thus be obtained in much the same way as by the positions of the violin.

Seven positions on the B flat trombone (tenor-bass).

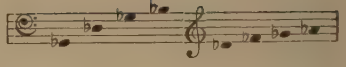
I. Position with closed slide.

II. With the slide open about 3⅛ in.

III. With the slide open about 6½ in.



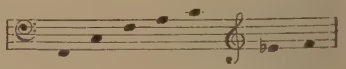
IV. About 10 in.



V. About 13¾ in.



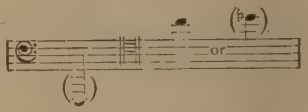
VI. About 17¾ in.

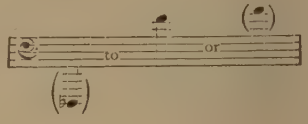


VII. About 22 in.

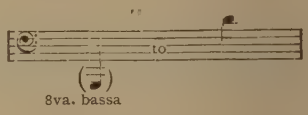
Compass.—The compass of the trombone is two octaves and a sixth. It is a non-transposing instrument; the music sounds as written. There are four chief trombones used in orchestras. The compass of each is as follows:

The Alto in F (or in E flat correspondingly lower).

The Tenor or the Tenor-bass* in B flat.

The Bass in G (for the Bass in F or the Double Slide in E flat, correspondingly lower).



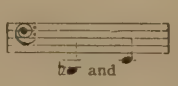
The Contrabass in B flat. An octave below the Tenor-bass.



The compass given here is extreme, and includes the notes obtained by the slide; the notes which are in brackets are very difficult. The fundamental notes on these brass instruments are not very much used, as their tone is less rich than that of the notes obtained by overblowing. The contrabass trombone is not much in request in concert orchestras, but Wagner has scored for it effectively in "The Ring."

Quality of Tone.—This varies greatly in the different instruments and registers. The alto stands in regard to timbre between the trumpet and the French horn. The tenor and tenor-bass are the most generally used of all trombones; they are of powerful and penetrating tone-quality. The bass has a full, rich, sonorous timbre, suitable for heroic, majestic music. There are, besides the slide-trombone, which is most largely used, two others: 1. The valve-trombones, corresponding to the four above mentioned in keys, and built in the same manner with the addition of three valves, instead of the slide, which enable the performer to attain to a greater technical execution; but as the tone of the instrument suffers thereby, the valve-trombones are

* The tenor-bass is of the same pitch as the tenor, but the bore being wider, the fundamental and pedal notes are effective and the compass is thus extended downward, but with a gap between



little used in concert orchestras. 2. The double-slide trombones, made in B flat, G bass, and in F and E flat contrabass, in which the extension of arm necessary in the bass instruments for the lowest positions is considerably lessened; but greater nicety in the adjustment of the slide is, of course, required to produce the requisite semitone positions in tune.

Possibilities.—The trombone is capable of rendering sustained notes, diminuendo and crescendo; scales and arpeggios, except in the lowest registers and when the tempo is very quick. The legato style of playing is now dying out and giving place to the blare, which is greatly to be regretted.

Origin.—Trombone means in Italian, "large trumpet or tromba." The trombone family, being derived from the trumpet or buccina, is of great antiquity. The immediate predecessor of the trombone was the sackbut, the earliest form of draw or slide trumpet with a short slide giving at most three or four positions. The sackbut developed into the trombone with seven positions at the beginning of the sixteenth century, when we find that the Neuschels of Nuremberg made slide-trombones quite as good as the modern ones. Many hypotheses have been advanced to explain the origin of the word sackbut. The word seems to be derived from the Spanish *sacabuche* through the French *saquebute,* but the earliest mention of the instrument recorded in England is *shakbusshe* at the end of the fifteenth century, and *sackbut* appears at the beginning of the sixteenth century. The Spanish word is derived from *sacar,* to draw out, and *buk* or *buque,* a Moorish military trumpet, therefore obviously the "draw-trumpet," a designation by which the sackbut was, in fact, popularly known at first in the Netherlands, in Italy, in England, and in Scotland. The sackbut sprang into being, therefore, when the earliest application of the slide was made to the trumpet. There is reason to think that the slide was used first with the long, straight or partly bent trumpet or busine, as it was called during the Middle Ages, and as a device for reducing the unwieldy length of the instrument. The slide was, therefore, at first pushed in to extend the compass by filling in the gaps of the scale, and in the normal position the slide was drawn out to the full extent of the tube. Pushing in the slide had the effect of raising the pitch proportionately by shifts of a tone each; three shifts (four positions) sufficing to fill in the diatonic scale between the second and eighth harmonics when the full possibilities of the slide were realized. After the trumpet had assumed its present form in the fifteenth century the inverse principle was applied to it; the slide was then made double, thus reducing the length of the shift by half, and it was drawn out to lower the pitch. This change was probably deliberately made in order to obtain new tenor and bass instruments. The sackbut was well known in England; in Henry VIII's time we hear that there were ten sackbuts in the royal band.

Trombones were justly recognized by Bach as adding great splendor to the orchestra, but they fell into disuse after his time, till Mozart restored them to an honorable place in the orchestra. Beethoven adopted them, and Wagner used them to perfection.

The trombone color is often menacing and threatening.

XVII. BRASS-WIND

THE TRUMPET

French, Trompette. *German,* Trompete.
Italian, Tromba.

THE trumpet belongs to the class of brass instruments with cup-shaped mouthpieces.

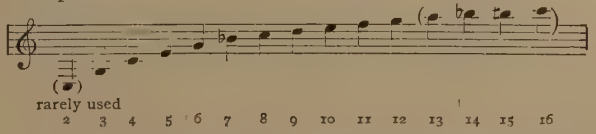
Construction.—The trumpet consists of a long, narrow tube of brass or silver, doubled round twice upon itself and ending in a bell. The bore, of very small caliber, is cylindrical from mouthpiece to bell-joint, including all valve-tubes and the tuning-slide. The bell-joint is conical and is of paramount importance in determining the timbre and harmonic scale of the trumpet. The mouthpiece is a hemispherical convex cup with a rim rounded on the surface; the shape is of importance, and the diameter of the mouthpiece varies according to the pitch and to the lip-power of the player, who must choose one to suit him. The lips are stretched across the cup, and act as vibrating membranes like the vocal cords. There are three chief kinds of trumpets: (1) The natural trumpet, in which the length and pitch are varied by means of crooks; (2) the valve-trumpet, provided with pistons; (3) the slide and double-slide trumpets, arranged like the trombone, with double sliding tubes. The first and third of these are now practically obsolete.

Production of Sound.—In the trumpet, as in the horn, the harmonic scale (from the third to the tenth upper partials) is produced by varying the tension of the lips and pressure of breath; the pitch of this scale may be altered in the natural trumpet by changing the crook, and therefore the key of the instrument, which then gives out the same harmonics, but in the new key. Crooks are interchangeable coils of cylindrical tubing, adding length to the original column of air, and therefore deepening the pitch. They are called by the name of their fundamental tone, which cannot, however, be obtained on the trumpet. The crooks in use now are the F, E, E flat, D, C (higher), B flat, and A (lower).

In the valve or piston trumpet, a complete chromatic scale can be obtained as on the cornet, the first valve lowering the pitch 1 tone, the second ½ tone, the third 1½ tones. It is on the slide-trumpet, as on the trombone, that the player can obtain his notes most accurately in tune, as the ear assists in the adjustment of the slide, which has four positions similar to those of the trombone, the closed slide producing the first, and each of the others reproducing the harmonic series a semi-tone lower.

Trumpets are always scored for, like the French horn, in C, and are therefore transposing instruments.

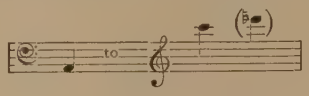
Compass.—The harmonic series is as follows for all trumpets:



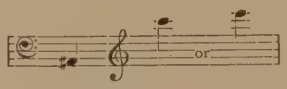
The notes in curves are hard to obtain. The lower B flat, always being a little flat, requires more tension, and can never be played in tune piano; the F is

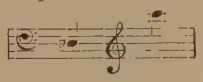
always sharp, which is remedied by a looser embouchure. The compass of the three kinds of trumpets is as follows (the real sounds are given):

For the natural trumpet with crooks.



The note in curves when the high A flat crook is in use.

For the slide and double-slide trumpets with chromatic semitones.

This instrument is a non-transposing one, the music being written as sounded.

For the valve-trumpet in B flat.

Quality of Tone.—The tone of the natural and slide trumpets is penetrating, noble, brilliant, majestic, and suitable for triumphant and tragic strains; the lowest notes on trumpets of low register are bad, and the highest are comparatively easy to produce; notes played piano have a charming effect. The slight difference in the quality of tone between trumpet and trombone is accounted for by the wider bore in the latter. The tone of the valve-trumpet is similar to that of the cornet, but brighter and more incisive.

Possibilities.—All natural open notes except perhaps the lowest and highest can be sustained diminuendo and crescendo; rhythmical figures, scales, and arpeggio passages can be played in slow or quick time. Tonguing, double and triple, can be used with great effect to produce in quick time a sort of tremolo or shake. Tonguing is the articulation with the tongue of the syllables "te-ke," or "ti-ke," quickly repeated for groups of two or four notes, and of "te-ke-ti" for triplets. On the valve-trumpet, chromatic as well as diatonic scales can be played.

Origin.—The trumpet is of ancient origin, having been in use among the ancient Egyptians and the Semitic races. The Greek Βύκάνη, the Roman buccina and lituus, and the medieval busine were predecessors of the trumpet. The bore was partly or entirely cylindrical in all these, and the whole length of tube was almost or quite straight except in the buccina, which was curled round the performer's body, as is the case with the helicon variety of the modern tuba. The trumpet was known during the Middle Ages as the busine, tromba, trompe, or trump. In its earliest form it consisted of a long, slender, and almost cylindrical tube with a wide bell. The tuba may be distinguished from the busine by its frankly conical bore of much greater caliber. The busine has been pictured by nearly all the great masters. Fra Angelico has painted angels with trumpets, both straight and bent. The idea of bending the tube in three parallel branches is sometimes ascribed to Maurin (1498-1515), but pictures show that it must have been practised in Italy before that time. This form of trumpet, known as the natural, subsisted for three hundred years, and performers on it had acquired great dexterity and a large compass to the twentieth harmonic, as is proved by studying the scores of Handel and Bach. There is a modern straight soprano octave trumpet with three pistons, called the Bach trumpet, which is peculiarly adapted for the scoring of those great masters. The slide, keyed, and valve trumpets are the later developments of the instrument. Two or three trumpets are used in the orchestra as a rule; some of Wagner's scores, such as "Tannhäuser" and "Lohengrin," require many more. There is a growing tendency, much to be regretted, to replace this instrument by the more commonplace cornet, which has a less noble timbre. This is specially the case in France. Wagner has scored for a bass trumpet with pistons in E flat, which is really a modified trombone. The trumpet was not a favorite instrument with Beethoven, and there are no difficult passages for it in his works, although the trumpet-calls in the "Leonore" overtures, Nos. 2 and 3, are very important.

XVIII. BRASS-WIND

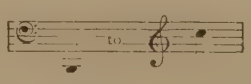
THE OPHICLEIDE AND THE DOUBLOPHONE

French, Basse d'Harmonie or Ophicleide.
German, Ophikleid.

THE ophicleide belongs to the class of brass-wind instruments with cup-shaped mouthpieces, and it is one in which the length of tube is varied by means of lateral holes and keys.

Construction.—The instrument consists of a conical wooden or brass tube, widening out gradually to a funnel-shaped bell, which is vertical; the tube is doubled upon itself once, ending at the narrow end in a tight coil, from which protrudes a straight piece bearing the mouthpiece, which is a hemispherical convex cup. The modern ophicleides have eleven keys, which are quite easy to finger.

Production of Sound.—The lips stretched across the mouthpiece act as vibrating reeds, or as the vocal cords in the larynx. The bell can give out the fundamental C, but, as on the horn, it is practically impossible to produce it. Most ophicleides are in C; the first hole being left open lowers the pitch of the instrument a semitone to the key of B major; the second hole being kept closed raises the pitch a semitone from C to D flat; the third hole when closed raises the pitch to D; and so on with all the other holes, giving thirty-eight semitones. The method is similar to the positions on the violin and on the slide-trombone. This instrument is capable of the most accurate intonation.

Compass.—The compass of the ophicleide in C (the most used) is from

with all chromatic semitones; that is, just over three octaves. Both bass and treble clefs are used in notation. It is a non-transposing instrument.

Quality of Tone.—The tone of the lower registers is rough and bold, but capable of sustaining above it masses of brass harmonies; that of the medium is coarse, and that of the upper weak and unsteady. It seems a pity that an instrument so powerful, so easy to understand and learn, capable of absolutely accurate intonation, and possessing such a full compass, should have to be discarded on account of its timbre. Mendelssohn used it as an excellent imitation of the snoring of Bottom the weaver, in his "Midsummer Night's Dream" overture.

Origin.—The name of the ophicleide means a snake and door-key in Greek; it is a development of the old serpent bass and of the Russian bassoon. The ophicleide was said to have been invented by Frichot, a French musician living in London, in 1790; the honor is also claimed for Regibo, of Lille, who made improvements in the bore of the old serpent in 1780; and by Halary, of Paris, who claims the discovery of it in 1815, as derived from Halliday's keyed bugle, invented in 1810. Halary patented the ophicleide in 1821. It is recorded that two ophicleides were used at a musical festival in Westminster Abbey in 1834. There is very little concerted music written for this instrument. Mendelssohn seems the only classical writer who employs it freely. The parts written for the serpent in old music were given to it, but now they are played by the double bassoon.

THE DOUBLOPHONE

This is a new Besson instrument of a compound nature. It belongs to the class of brass instruments with cup-shaped mouthpieces.

Construction.—It consists of (1) a three-valved euphonium and (2) a perfect valve-trombone. In form it resembles the euphonium with a second bell at an angle of about forty-five degrees to the original one. The doublophone possesses two complete sets of tubing: (1) the brass tube, with wide conical bore of the euphonium, and (2) the narrow tube, with mixed cylindrical and conical bore, of the trombone. Both these tubes are in length and diameter of the usual proportions. The three pistons are common to both instruments, having a double set of bores, one for the euphonium and one for the trombone; a fourth auxiliary piston has a hook which enables the player to pull it out with the left thumb, and it returns automatically by means of a spring, when released, to its normal position. This fourth piston effects the instantaneous change from one instrument to the other; when it is closed, the column of air travels through the wide tubing of the euphonium; on opening the piston, the exit of the air is through the smaller-bored tubing and bell of the trombone; this latter unscrews, and can be taken off when only the euphonium is needed.

Compass and Production of Sound.—These are the same as for the tenor valve-trombone and the barytone euphonium. It is a non-transposing instrument; the music for it sounds as it is written.

Quality of Tone.—The tone is pure, rich, and full for the euphonium and clear and ringing for the trombone. For obtaining these effects in high degree, perfect mastery should be acquired by the player. Any misuse of the instrument becomes painfully apparent.

XIX. BRASS-WIND

THE CORNET

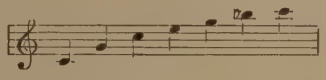
French, Cornet-à-Piston. *German,* Cornett. *Italian,* Cornetto.

THE cornet belongs to the class of brass instruments with cup-shaped mouthpieces.

Construction.—It is composed of a cylindrical tube of brass or electrosilver of a larger bore than that of the trumpet, but becoming conical just near the bell. This tube is doubled round upon itself. The bore of the cornet is mainly conical (but of a less pronounced taper than that of the flügelhorn) and also partly cylindrical, owing to the necessity of making all the valve-tubes and tuning-slides cylindrical. The mouthpiece, as before mentioned, is cupped like that of the trumpet, but larger, and as for that instrument the choice of the diameter depends much on the lip of the player.

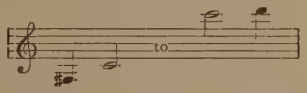
Production of Sound.—The sound is produced by stretching the lips across the mouthpiece, making them act like the vocal cords, and setting them in vibration by means of the breath. The harmonic series from the second to the eighth partial is obtained by the varied tension of the lips and pressure of breath called overblowing.

Harmonic Series.



The intermediate notes are obtained by means of three valves which lower the pitch, respectively, 1 tone, ½ tone, 1½ tones, by which means a chromatic scale throughout the compass can be obtained.

Compass.—The compass of the cornet is:



Quality of Tone.—The tone is somewhat between that of the horn and the trumpet, with all the blaring, penetrating quality of the latter, but without its heroic, majestic quality. There is a growing tendency in some orchestras, notably in France and America, to allow the cornet to supersede the trumpet, which is greatly to be regretted; for although the cornet is bright in tone and an agile instrument with great technical capabilities, its sound is hard and commonplace, and more suitable for solo playing or military music than for rendering serious concerted works. In Germany it is little used except in military bands.

Possibilities.—Notes sustained, crescendo or diminuendo; diatonic or chromatic scale and arpeggio passages; leaps; trills; and, in fact, all kinds of musical figures in any key, can be easily played on the three-valved cornet. Double-tonguing is also practicable, as in the case of the flute; that is to say, the articulation with the tongue of the syllables "ti-ke" for double and "ti-ke-ti" for triple, produces a staccato effect. Cornets can be transposed, by means of crooks, into various keys; those of B flat and A being the most used. Crooks are interchangeable spiral tubes

which add to the length of a column of air, and therefore to the depth of the pitch.

Origin.—The prototype of this instrument is thought to be the old posthorn, but the cornet seems to have been gradually evolved from the keyed bugle and the trumpet, rather than invented, and has been called a hybrid between the bugle and the high trumpet; it gives the same harmonics as the former, though the bore of the bugle is conical throughout. The modern cornet first made its appearance at the beginning of last century, though the name was formerly used to designate an ancient instrument of wood having a conical bore terminating without bell and blown through a cup or a funnel-shaped mouthpiece according to the type of cornet.

MODERN ORCHESTRAL INSTRUMENTS

SECOND SECTION

STRINGED INSTRUMENTS

(*a*) *Played with a bow:* The Violin, Viola, Violoncello, Double Bass.
(*b*) *Twanged by the fingers:* The Harp.

I. THE VIOLIN OR FIDDLE

French, Violon. *German,* Violin or Geige. *Italian,* Violino.

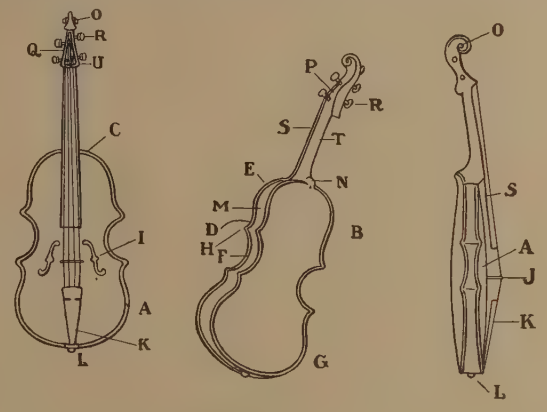
THE violin belongs to the class of stringed instruments played with a bow.

Construction.—It is made entirely of wood (except the strings), and consists of two parts: (1) the body; (2) the neck.

1. The body comprises: (A) The belly or soundboard forming the uppermost part of the body, and slightly and delicately arched. (B) The back, arched in the violin family and flat in that of the viols. (C) The purfling, a delicate little molding forming a border round the belly and back. (D) The edges which project over the sides or ribs and are called upper bouts (E) round the shoulders; center bouts (F) at the incurvations; and lower bouts (G) from the latter to the tail-pin. (H) The corners, which are strengthened from within by means of the four corner blocks, 1½ inches in thickness, which fill in the corners and lie closely upon the inside between the soundboard and back. (I) The f-holes (as the sound-holes are called from their shape), which form a distinctive feature of the violin tribe. (J) The bridge, which assumed its present delicate proportions under Stradivarius. (K) The tail-piece, which is pierced with sufficient holes to receive the strings. (L) The tail-pin with its rest, which is the kind of button to which the tail-piece is attached by means of a loop made from a gut string (generally a D string), and which the ebony rest supports at the edges of the violin, thus protecting them, and preventing the rubbing or chafing that would otherwise result from the tension of the loop. (M) The shoulder, which is at the base of the neck, where it fits on to the body of the violin round the button (N) which is cut in one piece with the back—not added.

2. The neck comprises (O) the volute called the scroll, with (P) the cheeks of the scroll forming the walls of the peg-box (Q); O, P, and Q constituting the head. (R) The pegs, which are four in number in the violin, viola, and violoncello, and three, four, or five in the double bass, are screws serving to tighten or slacken the strings which are wound round them. (S) The fingerboard, which lies flat on the neck, but stands away from the soundboard; it enables the strings which would otherwise be open to be stopped by the fingers at any of the intervals of the diatonic and chromatic scale. (T) The neck proper, which is adjusted to the body at the shoulders round the button (N). (U) The nut, which is a small strip of ebony forming a little bridge between the peg-box and the fingerboard, is provided with small grooves to receive the strings and raise them clear of the fingerboard.

In the interior of the violin for the support of the bridge, and placed under its right foot, is a thin cylinder of wood called the sound-post; under the left foot



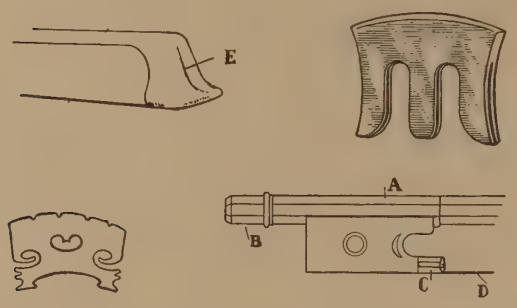
is a beam called the bar, which is a piece of wood glued on lengthways to the arched soundboard.

The back, ribs, and bridge are of maple wood; the soundboard, bar, and soundpost, of fir; the fingerboard, nut, tail-piece, and pegs, usually of ebony; the exterior is varnished.

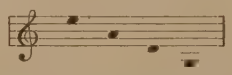
The most perfect bow, which serves as a model for others, is the one we owe to François Tourte, born in Paris, in 1747. It consists of:

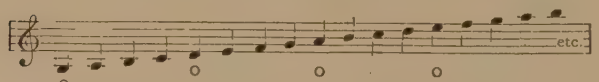
(A) The stick, made of Pernambuco wood, which alone combines the requisite lightness and power of resistance; it is bent by heat till it is slightly convex to the hair. (B) The screw or ferrule at the extremity of the stick held by the hand, which is the means of tightening or loosening the hair of the bow. This screw, about 3½ inches long, hidden within the stick, runs through the eye of another little screw at right angles to it, which is firmly imbedded in the nut.

(c) The nut slides up and down in answer to the screw along the stick, and contains a little cavity or chamber into which the knotted end of the hair is firmly fixed by means of a little wedge, and then flattened into a ribbon by means of a ferrule. The hair outside the nut is still further protected by a little mother-of-pearl slide. The hair (D) is carefully chosen from the best white horsehair, and each of the 150 or 200 composing the half-inch wide ribbon



of each bow must be perfectly cylindrical and smooth. The head of the bow (E) is cut in one piece with the stick, and is fitted with a chamber and wedge contrivance similar to that of the nut, and in it the other end of the hair is immovably fixed.

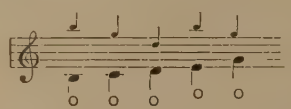
Production of Sound.—Notes are produced in various ways on the violin. 1. The open notes by drawing the bow (the edge of the horsehair held at right angles to the strings) backward and forward between the bridge and the fingerboard, thus setting the strings in vibration. The names of the open strings are (1) E, (2) A, (3) D, (4) G.

2. Every other chromatic and diatonic succession of notes is obtained by using the bow as above, and in addition, pressing one of the strings against the fingerboard, with one of the four fingers of the left hand, according to the notes desired, thus shortening the strings by what is called stopping. The hand slides up the neck of the violin in fourteen different positions, each beginning one degree higher than the last, and using each of the four fingers in succession. This will be better understood from the following diagram. The first seven positions are most used:

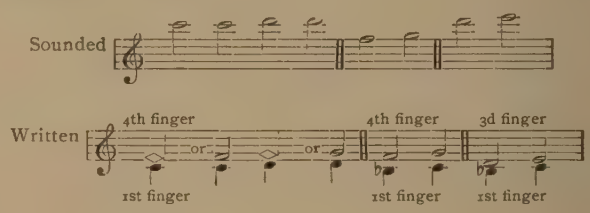


1st position	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4 etc.
2d "		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
3d "			1	2	3	4	1	2	3	4	1	2	3	4	1	2 3
4th "				1	2	3	4	1	2	3	4	1	2	3	4	1
5th "					1	2	3	4	1	2	3	4	1	2	3	4
6th "						1	2	3	4	1	2	3	4	1	2	3 4
7th "							1	2	3	4	1	2	3	4	1	2 3

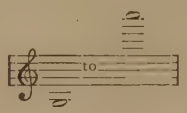
The "o" represents the open string. Beginning on the G string, and playing four notes in the first position on each of the strings (the first on each string being an open note), the above passage is obtained.

3. The third method of producing notes on the violin is by harmonics, notes having a different tone-color, and enabling the performer considerably to extend his compass in the highest register; there are two kinds of harmonics, natural and artificial. These harmonics are the tones which a string gives when, instead of vibrating as a whole, it vibrates in parts. The natural harmonics are obtained by touching the strings with the fingers of the left hand, so as to divide them in their length without sufficient pressure to bring them into contact with the fingerboard. The natural harmonics are indicated by an "o" under the note to be touched. The artificial harmonics make even higher sounds possible, and are produced by stopping an open string firmly with the first finger, and touching the string lightly with one of the other fingers at the intervals of a fourth (most generally used and easiest), of a fifth, or of a third. A few examples are subjoined; the complete list would be beyond the scope of this work.

Natural harmonics on the G string.

The little notes above show the harmonics, the quarter notes below, the note touched to produce it.

Artificial harmonics.

The quarter notes played with the first finger are pressed firmly, and the half notes are touched lightly with the fourth or third finger, thus producing various harmonics.

Compass.—The compass of the violin varies from three to four octaves generally in the orchestra, but in the high register no true limits can be assigned, for the virtuosi are continually extending it according to their skill.



The treble or G clef is used in notation.

The violin is a non-transposing instrument, which can play in all keys (the music for it sounds as written), but those which contain most open notes, i.e., those of C, G, D, A, E, F, and their relatives minor are the best, for the open notes are more sonorous than the stopped ones.

Quality of Tone.—An enormous variety of quality can be obtained from this instrument. Of the four strings, the notes of the E string are clear and sharp,

of the A string soft and round, of the D string very mellow and deep like the chest notes of the human voice, and of the G string, perhaps because covered with silver wire, broad and full. The harmonics have a quality resembling that of the flute (hence their name in French and German, flageolet), of birdlike ethereal clearness and softness.

If the strings of the violin are set in vibration by the bow near the bridge (sul ponticello, sur le chevalet), the tone becomes shriller, harder, and more incisive, as also when the bow is used near the nut; (au talon) when the bow touches the strings over the fingerboard (sul tasto, sur la touche) the tone becomes soft and flutelike. When the point of the bow is used, lightness is obtained—from the heel energy and from the whole length amplitude.

In addition to these, innumerable shades of tone can be produced on the violin by an imperceptible movement of the arm, a pressure with the bow, an unconscious sentiment of the performer, for there is no instrument, except the voice, that responds more readily to the soul of the musician, or is capable of greater expression; from it proceed at will sighs, laments, weeping, musing, joy, mirth, triumph, passion, etc.

Possibilities.—The technical possibilities of this instrument are almost infinite: chromatic and diatonic scale and arpeggio passages, both legato and staccato; chords (with reservations), trills, grace notes, sustained notes, diminuendo and crescendo, leaps, etc. Varied effects are produced by the tremolo—a rapid vibrating repetition of the same note by a rapid movement of the bow and by the pizzicato, when the strings, instead of being vibrated by the bow, are plucked by the fingers, as in playing the guitar, which produces dry, short notes without resonance. Both these devices, the tremolo and the pizzicato, were invented by Monteverde at the beginning of the seventeenth century for dramatic effect in his opera "Tancredi e Clorinda." Further effects are obtained by use of the mute or sordino, a little wooden or brass implement, like a tiny comb, placed on the bridge, and which acts as a damper and produces a muffled, veiled softness peculiarly penetrating.

Origin of the Violin Family.—Two principal and diametrically opposed opinions prevail as to the ancestry of the violin. The first derives it from the Greek lyre through the intermediary of the monochord and its successors, the tromba marina, the crwth, crowd, rebec, gigue, and viol, leaving the Moorish rebab out of the question altogether. The second derives the violin from the East through the rebab, introduced into Spain by the Arabs in the eighth century, and gives it the ravanastron of the Hindus for a progenitor.

In determining the ancestry of the violin, let us leave the bow out of the question; firstly, because even less is known of its history than that of the violin; secondly, because it was applied equally to most stringed instruments with a resonating body and bridge, which before had been twanged by the fingers or plectrum.

The chief feature of the violin is the sound-chest, which, roughly speaking, is composed of two arched boards connected by ribs or sides in contradistinction to the vaulted backs and flat soundboards without ribs of the rebecs, gigues, crwths, lyres, lutes, mandolins, like a vertical section of a pear.

There was an ancient stringed instrument with a shallow sound-chest, of which the flat parallel boards were joined by ribs; in addition, its various types possessed bridge, pegs, tail-piece, sound-holes, purflings, and perhaps fingerboard; this prototype of the violin, which differs chiefly in its earliest form by having no neck, is, moreover, identical with the fiddle and violin in name; this instrument is the cithara of the Greeks, the chetarah or ketharah of the Chaldees, the kissar of the Nubians, the kithara of the Arabs (pronounced by the Arabs of Northern Africa "githara," by the Moors of Spain, cuitra or guitra, and finally called guitarra before the fourteenth century, and in England, guitar).

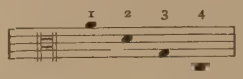
This instrument, differing in construction from the lyre, but of the same family, and introduced to the Greeks from Asia, did not come to us solely through the Arabs; before their invasion of Spain, the instrument was already in use there, introduced by the Romans under the name of fidicula (later corrupted and softened to vihuela, vielle, viol). San Isidore, a bishop of Seville, of the seventh century, tells us that the ancients called the kithara *fidicula.* Now the guitar-fiddle of the troubadours has the characteristic sound-chest of the violin, incurvations, bridge, sound-holes, tail-piece, fingerboard, and bow, all differing in detail from those of the modern violin, of course, but similar in principle. The ancestor of the modern guitar was identical with the guitar-fiddle until the moment when the bow was applied to the latter, then it rapidly developed into vielle, viol, violin; while the guitar remained practically stationary.

The instruments with vaulted sound-chests, the rebab, rebec, crwth, crowd, rotta, gigue, need not be taken into consideration; they reached no modern development and are now extinct (the lute and mandolin are directly derived from Arab instruments of the same date as the rebab); further, they did not possess a single feature of the violin not already shown in the cithara.

The first steps toward the production of the violin are ascribed by some to Gaspar Duiffopruggar, or Tieffenbrücker (1514-72). He was born in Bavaria, and lived successively in Bologna, Paris, and Lyons. His violins were much prized for their beautiful tone, and are now very rare. Others name Gasparo da Salo as the inventor of the first modern violin, at the end of the sixteenth century. It is, however, from Cremona that we get the perfect instrument from the hands of the Amati family (1592-1682), Antonio Stradivarius (1650-1737), and the Guarneri family (1630 to about 1695). The first solos for the violin were written by Biagio Marini in the middle of the seventeenth century. Monteverde was the first to assign to the violin its proper place as leader and to give to the strings a prominent position in the balance of the orchestra. In modern orchestras of average size, there are from 18 to 38 violins, divided into firsts and seconds. On some great festival occasions, as will be seen from the table given on a preceding page, a vastly greater number have been employed. The tremendous effect of such a combination passes all description.

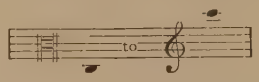
II. THE VIOLA

THIS member of the violin family is a little larger than the violin, and the remarks as to construction, possibilities, and origin apply equally to the viola —its compass lies a fifth below that of the violin, the four strings being (1) A, (2) D, (3) G, (4) C.



The alto clef, the C clef on the third line, is used in notation, except in the high register, for which the G clef is used.

Compass.—The practical compass of the viola is from



or higher, according to the capabilities of the performer.

Quality of Tone.—The sound of the strings of the viola is a peculiarly telling one and melancholy in accent. The tone of the upper register, forming the link between the cello and violin, is most used in the orchestra.

The viola has been much neglected and long unappreciated by musicians, who were content to use it to double, an octave higher, the upper part of the bass. The great masters since Mozart, however, have recognized its merits and written melodies and separate harmonies for it. The tone of the viola is so penetrating and so captivating to the ear that it is not necessary to have as many violas as second violins in the orchestra.

Ritter Viola.—The ordinary viola is one-fifth larger in size than the violin, while its strings sound a perfect fifth lower. As the increased size is not sufficient to cause this lowering of pitch, the viola needs larger strings than the violin, and less tension. Both of these tend to dull the tone. Ritter constructed a viola half as large again as the violin, so that the depth of pitch depended on increased size alone. He called it the viola alta, but the public has given it his own name. It is so large that not every man can play it, but it is well worth playing, for its tones are full, rich, and very beautiful.

III. THE VIOLONCELLO

French, Violoncelle. *German,* Violoncell.
Italian, Violoncello.

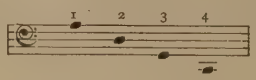
THIS instrument belongs to the violin family, and is constructed on the same principles, but much larger. On account of its size, it is either held between the performer's knees, or it is made to rest on the floor by means of a foot or spike, the fingerboard pointing toward the left shoulder.

Production of Sound.—The sounds are produced in the same manner as on the violin, but the fingering is much more difficult; for the high register, shortening the strings by means of the thumb is resorted to. The thumb of the left hand is firmly placed horizontally across the string at the note over which the sign ⌶ or ⌶ is placed, and the four fingers then stop the notes in the usual manner. The thumb notes are of a thinner and less agreeable quality than the others, and, except with first-rate performers, very difficult to obtain absolutely true and even in tone.

Harmonics, natural and artificial, are produced as on the violin, excepting that in the latter kind, instead of the first finger, the thumb is used to stop the string, the other fingers touching the nodal points.

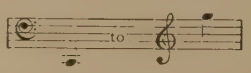
The harmonics are very beautiful on the cello, sounding like the mellow, round notes of the flute; and they are accordingly used in preference to the ordinary notes of the upper register, as these have no beauty and are not much called into use, especially in the orchestra, where they would encroach on those of the viola.

The four strings of the cello bear the same names as those of the viola, but are pitched an octave lower, i.e., (1) A, (2) D, (3) G, (4) C.



The bass F clef, the tenor C clef on the fourth line, and treble or C clef are used in notation.

Compass.—The compass is 3½ octaves with all chromatic intervals, and higher notes are obtained by virtuosi in solo playing.



Quality of Tone.—The tone is of extreme sonority, mellowness, and richness, the notes of the A string having a voice of penetrating vigor and passionate brilliancy, most suitable for rendering melodies. Nothing, in fact, can excel a mass of cellos on the A string in expression, in voluptuousness of sound and tender passion. The cello is the instrument most suited to express the deepest feelings of composer and performer.

Possibilities.—These are the same as for the violin, except that, on account of its greater length of string, passages requiring a great stretch of hand are less practicable, and owing to the great depth of quality and thickness of string the same extreme agility as on the violin is not possible; chords (with reservations), the pizzicato, tremolo, staccato, legato styles, trills, and the use of the mute are all practicable. In the orchestra the cellos often double the double bass an octave higher, and the music for both is written on one stave, and in that case with the word "bassi." However, since the days of Beethoven, melodies are frequently given to the cello. Wagner in his operas has scored solo melodies of wonderful beauty for this instrument.

Origin.—The name violoncello is a diminutive meaning "small violone," or double bass, not violin; but it is really a bass violin, formed on a different model to the violone, which has the sloping shoulders and flat back of the viol family, whereas those of the cello are

rounded. The cello is traced to Italy early in the seventeenth century, when it formed the fundamental bass in Church music; its use in secular music and as a solo instrument is of later date, in the eighteenth century. The first English cello was made during the reign of Charles II. The immediate predecessor of the cello was the viola da gamba, which in its day was a most important instrument. Its general disuse has been keenly regretted by many musicians. The violoncello was the only instrument admitted to the Church service by the Puritans in the early days of colonial life in America.

IV. THE DOUBLE BASS

French, Contrebasse. *Italian,* Contrabasso or Violone. *German,* Kontrabass.

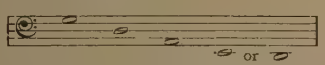
THE double bass is the largest of the stringed instruments played with a bow, and belongs really to the viol family.

Construction.—The double bass has slanting instead of round shoulders; that is to say, where the belly is joined by the neck and fingerboard the former has a very decided point, whereas in the violin, viola, and cello the fingerboard is at right angles to the horizontal part of a wide curve. It is thought that the shoulders of the double bass are of necessity made drooping for additional strength of construction, on account of the strain occasioned by the tightness of the strings. The double bass was formerly made with a flat instead of an arched back; now the instrument is as often made with an arched as with a flat back. The bow is shorter and stouter in make than the violin bow.

Production of Sound.—The chief difference between the cello and double bass in producing the sound is that in the latter, owing to the extreme length of the string, the stretches for the fingers are very great, and owing to the thickness of the strings great force is required to press them against the fingerboard when they are vibrating.

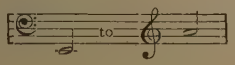
On account of the great size of the double bass the performer often plays standing.

The four-stringed double bass is now almost exclusively in use in orchestras, and the four strings are tuned in fourths, thus:



The F or bass clef is always used in notation, and to save so many leger lines, the music is always written an octave higher than played; but the double bass is not otherwise a transposing instrument.

Compass.—The compass is nearly three octaves, from

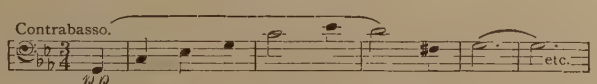


an octave lower.

Quality of Tone.—The tone is rather rough, very powerful, and varies greatly in its degrees of loud and soft. The deep notes when played piano sound weird or grotesque, and pizzicato tones are used sometimes instead of the kettledrum; when forte, the tone is overwhelming, grand, gigantic. The lowest octave is seldom used, except as a fundamental octave bass to cello, bassoon, or trombone. The tone in the pizzicato is full and rich, as the vibrations are slow, and it changes character according to the harmonies which lie above it. With a chord of the diminished seventh above it, the pizzicato sounds wild and threatening, but with the common chord, calm and majestic.

Both natural and artificial harmonics are possible on the double bass, but the natural are the best (see what is said of "harmonics" in connection with the violin). The upper register is not used in orchestral music, as that pitch belongs to the cello.

Possibilities.—Quick passages, though possible, are not advisable: they cannot sound clear, for the strings require time to vibrate; but excellent effect is produced by what is called the "intermittent tremolo"; owing to the elasticity of the bow, it rebounds several times on the strings when a single blow is sharply struck, forming a series of short tremolos. Long tremolos would be too exhausting to the player to be much used in quick tempi.

The double bass is the foundation of the whole orchestra, and therefore of great importance; it plays the lowest part, often, as its name indicates, only doubling the cello part an octave lower. It is only since the beginning of the last century that an independent voice has occasionally been allotted to it—as in the scherzo of Beethoven's symphony in C minor:

In the finale of the Fourth symphony and the trio of the scherzo of the Fifth, Beethoven also made daring innovations on the contrabass, giving it most rapid and independent passages.

Origin.—Whether the violin or the double bass was the first invented is still a matter of dispute. As the double bass has the characteristics of the viol family, it was probably the earlier instrument, and its name, which means "large viol," seems to indicate that it is an offshoot of the viol, from which it only differs in the matter of the number of strings and of the sound-holes. These, instead of being C-shaped, back to back, are f-holes, as in the violin. The most probable hypothesis is that it is the bass viol brought up to date after the violin made its appearance, to complete the quartet.

V. THE HARP

French, Harpe. *German,* Harfe. *Italian,* Arpa or Harpa.

THE harp belongs to the class of stringed instruments of which the strings are twanged or vibrated by the fingers.

Construction.—The harp is an instrument of triangular shape of the most elegant and beautiful pro-

portions. Its various parts are (1) the pedestal or pedal-box, on which rest (2) the vertical pillar, and (3) the inclined convex body in which is set the soundboard; the pillar and body uphold (4) the curved neck with (5) the comb which conceals the mechanism for stopping the strings.

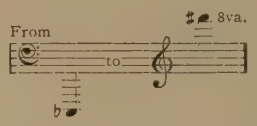
1. The pedestal or pedal-box forms the base of the harp, and in both single and double action harps contains seven pedals; the difference between the two actions is that in the single the pedals only raise each string one semitone, being capable of one drop only into a single notch; whereas in the double-action harp, the pedals, after a first drop, can by a further drop into a second notch shorten the string a second semitone, thus making each string serve for flat, natural, and sharp. Each of the seven pedals acts upon one note of the diatonic scale of C flat major throughout the compass. This scale was not chosen arbitrarily, but out of necessity, on account of the construction of the harp with double action. The pedals remain in the notches until released by the foot, when a spiral spring sends the pedal back into its normal position. This spring can be seen lying under the pedal by turning up the harp. The pedestal, as its name indicates, serves merely to allow of the harp standing upright and to hold the pedals; hence its other name pedal-box.

2. The vertical pillar is a tunnel in which are situated the seven rods worked by the pedals, which set in motion the mechanism situated in the neck of the instrument. The pillar apparently rests on the pedestal at the base of the body; in reality it rests on a shoulder of brass very firmly screwed to the beam forming the lowest part of the body; and the pedal-box and its cover can be removed without in the least disturbing this connection.

3. The body or sound-chest of the harp is in the shape of half a cone. Erard was the first to make it in two pieces of wood, generally sycamore, instead of in staves like that of lutes, mandolins, etc. The flat soundboard is of Swiss pine. The body is strengthened on the inside by ribs, and at the back are five sound-holes, which, in older models, were furnished with shutter-doors opened at will by the swell pedal (the fourth from the left, worked by the left foot). As the increase of sound obtained by means of the swell shutters is practically nil, they have been discarded in the newest models. After making a knot at the end of the strings, they are inserted through holes in the center of the soundboard, and kept in their places by means of pegs, each provided with a groove in which the string lies.

4. The neck is a curved piece of wood which rests on the body at the treble end of the instrument, and joins the pillar at the bass end. In it are set the tuning-pins, round which the strings are wound. The neck further comprises two brass plates, sometimes called the comb, which conceal part of the mechanism for shortening the strings and producing additional semitones by the agency of the pedals. On the front brass plate (to the left of the player) are to be seen first a row of brass bridges, against which the strings rest on leaving the tuning-pins, and which determine the length of the string from the peg in the soundboard; secondly the two rows of brass disks called forks, connected by steel levers, each disk furnished with two studs for grasping the string and shortening it. If one watches these while the harp is being played, he will see that when the pedal is depressed to first notch the lower disk turns a little way on an arbor or mandrel, still keeping the studs clear of the string; the external steel levers are set in motion, and the result is that the upper disk revolves also till the string is caught between the two studs and shortened. If the same pedal be pressed down to the second notch, the lower disk revolves again till the string is a second time grasped and shortened, the upper disk remaining motionless the while. The reason for this is that each pedal is a lever set upon a spring, and by depressing the pedal, the pedal-rod in the pillar is drawn down, setting in motion the chains and arbors connected with its upper extremity and situated within the brass plates, with the visible result described above.

The strings are of gut in the middle and upper registers, and of covered steel wire in the bass. The C strings are red and the F blue. The strings are usually forty-six in number, and are arranged in the diatonic scale of C flat major.

The compass of the harp is usually 6½ octaves.

The double stave is used in notation with the treble and bass clefs.

The old single-action harp, before the time of the Cousineaus, used almost always to be tuned in the key of E flat major.

Production of Sound.—The modern harp with double action is an instrument on which the enharmonic scale can be shown and heard, so that the appreciable difference between, for instance, F sharp and G flat can be detected. The harp in its normal condition, it has just been stated, is tuned to C flat major, but the performer can transpose it himself in a few seconds, by means of the pedals, into any other key. Each of the seven pedals influences one note of the scale throughout the pitch, beginning at the left side with D, C, and B, worked by the left foot (the pedals are called by their note names without reference to the fact that the harp stands normally in the key of C flat major), the swell or crescendo pedal now intervenes, and toward the right are the E, F, G, and A pedals, worked by the right foot. The pedals, on being pressed by the foot, sink at will into a first notch, raising the pitch of all the notes of that name a semitone, or into a second notch, raising the pitch a whole tone. The pedals remain in the notches until released by means of the foot, a spring then causing them to rise to the notch for naturals or the flat position. On the D pedal being lowered into the first notch, the D flat becomes D natural, and into the second notch D sharp, and so on for all the pedals. If a piece, therefore, be in D flat major, the instrument is transposed to that key by depressing the F and C pedals to the first notch; if the piece be in E major, the E, A, and B pedals must be slipped into the first notch

natural, and those of F, G, C, and D to the second sharp, and so on through all the keys. Accidentals or changes of key are easily made by means of the pedals, providing the transition be not too sudden. The reader will see that it is quite easy to transpose any piece of music into another key on the harp, as the fingering of any given passage is absolutely the same in all keys. Although the harp is thus able to transpose into any key at will, yet it is not called a transposing instrument, since its part in the score sounds exactly as written.

Only the thumbs, first, second, and ring fingers are used to vibrate the strings, the little finger not being either long or strong enough for the purpose.

Quality of Tone.—The quality of tone on the harp does not vary much in the different registers, but its tone is most brilliant and full in keys with flats, for then the strings are open, and not shortened by the pedals; in those with many sharps its tone becomes more penetrating, but less sweet; it might be characterized as resonant, but weak in the bass for any but solo purposes, clear and penetrating in the middle and treble, and very hard and dry in the last octave and a half. When used in an orchestra, with other instruments playing anything but pianissimo, the lower register cannot be heard, and the notes of the upper, when reinforced by flutes, piccolos, or oboes, give incisiveness and crispness to the parts, but the actual notes of the harp are indistinguishable. The composer is therefore dependent on the middle register for his tone-color, and even then the accompanying parts must not be too heavily orchestrated, for harps cannot cope successfully with strings played sostenuto.

Various effects, however, can be produced on this instrument (1) by harmonics; (2) by damping; (3) by guitar tones; (4) by glissando.

1. Harmonics are produced by resting the ball of the hand on the middle of the string and setting it in vibration by the thumb or the first two fingers of the same hand; the notes thus produced are of a very mysterious and beautiful tone; they are only used in the middle register, as the upper harmonics are wanting in tone. Two or three harmonics can be sounded together with the left hand (as it plays the lower register), and by using both hands, of course, as many as four are possible. 2. Damping is easily effected by laying the palm against the string in the bass and the back of the finger in the treble. 3. Guitar or pizzicato notes are obtained by twanging the strings sharply in their lower part, near the soundboard, with the nails. 4. The glissando is effected by sliding the thumb or finger along the strings in quick succession; and this does not necessarily produce a diatonic scale passage, for the harp can, by means of the pedals, be tuned beforehand to chords such as that of the diminished or dominant seventh, etc., etc.

Possibilities.—It is possible on the harp to play all diatonic scale and arpeggio passages—no chromatic, however, except in very slow tempo, on account of the action of the pedals, which requires time; chords of as many as four notes in each hand; trills (in the orchestra these are only effective in the upper register); while turns, successions of double notes in thirds, sixths, and octaves, can be easily played by using both hands, and are just possible in some cases to good players with one. The same note can be repeated slowly or quickly; in the latter case only by tuning the next string to a duplicate note, so as to give the string time to vibrate. For instance, if a repetition of G sharp be required, the G pedal is depressed to the second notch, and the A left in its normal condition, or upper notch, so that both strings practically sound the same note; the repetition is then made by two different fingers on different strings; the crescendo and diminuendo can also be effected. Although G sharp and A flat are the same on the piano and are called "synonymous," they are not quite identical in the scale of nature; there is a small but appreciable interval called enharmonic between them.

Origin.—The origin of the harp is anterior to the earliest records of civilization, and may have been suggested by the bow, since in the earliest representations of Egyptian harps there is merely a bow to which are fastened several strings, instead of a distinct neck and body. No Egyptian harp has been found with a pillar. James Bruce was the first to discover that this instrument was known to the Egyptians, for he found a painting on a wall at Thebes in which are depicted two musicians playing harps which must have stood about six feet high. One of these is bow-shaped, and the other triangular; neither has a pillar, but in both the pedestal is highly ornamented and carved. This painting is assigned by Egyptologists to the thirteenth century B.C. An instrument having affinities with both primitive harp and nefer (a sort of guitar), and called a nanga, was bow-shaped, with a boat-shaped sound-chest, a parchment or skin soundboard, down the center of which one end of the string was fastened to a stick, showing the harp principle, while the other was wound round pegs placed in the upper part of the bow. Illustrations show us that this primitive harp was held horizontally on the shoulder in what must have been an exceedingly uncomfortable attitude.

The Assyrian harp was similar to the Egyptian, but less graceful; the sound-chest was placed uppermost, and the bar for attaching the strings at a lower angle; the pillar was absent. Early Irish and Welsh harps likewise have no pillar. The Irish harp of the seventeenth century had a straight soundboard, a curved pillar, and the neck was higher at the treble end than where it meets the pillar. The Welsh harp of the same period had a perpendicular body and a straight pillar of unusual height, so that the neck ascended from the body to it in a graceful curve.

During the Middle Ages many expedients were tried to obtain accidental semitones, but none proved satisfactory. Chromatic harps were developed by German makers of the eighteenth century. About 1720 the first attempt at pedal mechanism by means of crooks pressing on the strings was made in Bavaria by Hochbrucker, but the system was too faulty to become general. Two Frenchmen, named Cousineau, were the first to make harps without crooks and yet with stopped semitones, by curving the neck to determine the proportions of the strings. They seem to have had an idea of double-action pedals in 1782, but it was imperfectly carried out, and the Revolution put an end to their work for the time. It was Sébastien Érard who gave us the double-action harp, patented in 1810.

Over three centuries ago, in 1581, when orchestras were in their infancy, we hear that in the "Ballet comique de la Royne," performed at the Château de Moutiers, on the occasion of the marriage of Mary of Lorraine with the Duc de Joyeuse, harps formed part of the orchestra or *concert de musique*. Be that as it may, the use of the harp was not general in the orchestra then; the old masters never scored for it, and it is only since about the thirties of the last century that it has found a place in orchestral music. At the present day there is at least one in every orchestra, to be used when the scores demand. As many as six are required and used at Bayreuth for Wagner's "Ring."

VI. TWO NEW HARPS

By Messrs. Lyon & Healy and Messrs. Pleyel, Wolff & Co.

WHEN Sébastien Érard patented the double-action harp in 1810, it was thought he had put the seal upon the history of the construction of the harp, as the Cremona masters did upon that of the violin, but a few years ago two harps attracted attention in London and elsewhere, claiming, the one many substantial and important improvements in the old system, and the other the invention of a totally new one, as simple as it seems ingenious. Whether either of these harps will effect what it aims at—no less a task than to supersede all previous makes—is a question which only time can answer. Those who considered the Érard double-action harp perfect in its construction seem to have had reason on their side. The instrument which existed centuries before our era was absolutely simple and guiltless of mechanism; it had not even a pillar, and each string gave but one note. At the beginning of the last century the instrument was provided with complex and hidden mechanism which enabled the performer to modulate into every key, and besides to sound the enharmonic intervals throughout the compass. The instrument presented no insuperable difficulties to the learner, the tone was clear and pure, and the possibilities of its technique were many and various, if not all-satisfying. It fell short in two particulars: (1) no legato was possible, as indeed is the case with all stringed instruments of which the strings are twanged: (2) although each note could be played natural, sharp, or flat, a chromatic scale was only possible in very slow time—indeed, its leisurely pedal mechanism made it imperative that those who scored for the harp should thoroughly understand its construction. Other disadvantages of the instrument were that it so easily got out of tune, and that the strings constantly required renewing, owing to the action of the forks in shortening them for the semitones. When any little thing went wrong in the mechanism, there was nothing for it but to send the instrument to the maker for repairs. Eighty years elapsed without substantial alterations. The history of the construction of the harp remained the same. Before the old favorite make can be dislodged from its present position it will have to be proved that the old disadvantages have been overcome, or that a new field of technique has been opened out.

A simple statement of the claims of these two harps will enable the reader to form an idea of their merits, and as real excellence always finds its way to the front, time will do the rest.

THE CHROMATIC HARP

The very word chromatic, as applied to a harp, seems revolutionary; it would mean a totally new and extensive repertoire for the instrument, and if this harp fulfills its promises, this will indeed occur. The technique, too, will be entirely altered.

This harp is still of too recent a date and too untried for it to be possible to do more than give a very superficial account of it.

Origin.—The principles of the piano have been borne in mind in constructing this harp, which is practically without mechanism. Henry Pape, a piano manufacturer, had in 1845 conceived the idea of a chromatic harp, of which the strings crossed in the center as in the instrument under consideration, and a description of it was published in the shape of a report. It was, however, not considered successful and nothing more was heard of the subject until Mr. Lyon, manager of the firm of Pleyel, Wolff & Co., took up the matter, and brought out the present harp.

Advantages Claimed.—The advantages this harp claims are: (1) That the whole pedal mechanism of the old harp has been discarded; (2) that the metal framing insures the strings keeping in tune as long as those of a piano; (3) that from its absence of mechanism there is nothing to get out of order; (4) that its technique is very easily acquired.

Construction.—This harp consists (1) of a pedestal on castors; (2) of a steel pillar which upholds (3) a wide neck containing two brass wrest-planks on which two rows of tuning-pins are placed; (4) of a sound-chest in which is firmly riveted the steel plate to which the strings are fastened, and of a soundboard pierced with eyelet-holes, through which the strings pass to the string-plate.

There is a string for every chromatic semitone, and the instrument is set in the key of C major, the white strings representing the white keys on the piano keyboard and the black strings corresponding to the black notes. The tuning-pins for the black keys are set in the left side of the neck in alternate groups of two and three, and those for the white in the right side in alternate groups of three and four; the strings cross halfway between neck and soundboard, which is the point at which the fingers twang them, thus enabling the left hand to play black notes above and white below the crossing, and inversely for the right hand. The notes are tuned to a set of twelve tuning-buttons, each of which, on being pressed, gives out one note of the chromatic scale tuned to the pitch of the diapason normal. These buttons are placed in the neck of the harp.

Possibilities.—This chromatic harp allows of an extensive repertoire, it being, in fact, possible to play on it any piece written for the piano, so far as the actual notes are concerned, though not as written, of course, the legato style being impossible still. One can hardly imagine that Bach's fugues (which have

been played on this instrument) would sound well, or indeed have much meaning, on the harp. This new invention would considerably enlarge the technical possibilities of the instrument, but its extended repertoire, to satisfy the requirements of art, must be written specially for it.

To facilitate rapid execution, a damping pedal has been added, which lowers upon the strings a large damper placed under the neck.

The chief disadvantages of this harp (and what new invention has none?) would seem to be (1) that the fingers work in two different planes; (2) that the very fact of the metal frame and pin-plate (the latter placed *within* the soundboard), rendered necessary by the increased tension of the extra strings, would probably tend to weaken the tone of the instrument.

THE LYON & HEALY HARP

To the casual observer, this harp does not differ from the Érard double-action, unless it be that in some models the soundboard is made wider for the purpose of strengthening the resonance power of the upper octaves. The chief advantages it claims are: Great solidity of construction, insuring durability, a singing tone, great responsiveness to the touch, and finally, an original method of construction on an interchangeable plan, so that any part which happens to break or get out of order can be replaced by post from the factory, thus rendering the transportation of the harp itself for repairs unnecessary. The improvements in construction which produce the above results are as follows:

1. By means of a simple and original manner of disposing the steel links (called chains), which are connected by lever systems to the rods set in motion by the pedals, each disk, wholly independently of its octaves, can be adjusted at will.

2. Instead of the pedal-rods being placed loosely in the pillar side by side with only tape wound round them, the rods are placed inside tubes which form a metal bearing, these tubes being brazed together in the proper direction and position. The tubes are then fastened solidly into the pillar, all rattling and sticking being thus obviated.

3. With regard to the arbors or mandrels which carry the disks and studs by means of which the strings are shortened to produce the semitones, there are important alterations. The parallel holes in the brass plates, one-tenth of an inch thick, which form the bearings for the arbors, are subject to wear, and after a while these bearings become worn and have to be made smaller by means of a center punch.

The Lyon & Healy patent adjustment has a mandrel terminating in a taper collar which the tension of the strings on the disk cannot succeed in loosening, for as the hole grows larger the taper mandrel fills it up. The other end of the arbor rests on a spiral spring which holds it in its place with a yielding pressure which adjusts itself automatically to any slight change of form the metal frame may assume under climatic or other influences.

4. The body or sound-chest is now firmly connected with the pillar by means of two steel stirrups, which are riveted to the frame situated in the lower extremity of the body before the soundboard is screwed into its place. The other end of these stirrups is firmly fixed under the base-board of the pillar, thus bearing the strain of the tension of the covered steel and compound strings, which frequently causes ordinary harps to collapse at this joint.

5. By a new method of ribbing the body of the harp, it has been found possible to construct the swell-door in one instead of five pieces.

6. An original device called a spreader, placed within the sound-chest, prevents the breaking up of the soundboard near the point where the gut and compound strings meet and allows a free vibration of all the parts, thus producing a greatly increased volume of tone.

7. The stringing of this harp is accomplished without pegs, except in the upper octaves, the string being passed through a small eyelet-hole, and kept in its place by means of a knot.

The compass, quality of tone, and the possibilities of this harp remain practically the same as for the Érard.

THIRD SECTION

INSTRUMENTS OF PERCUSSION

INSTRUMENTS of percussion are divided into two distinct classes: (*a*) those of definite musical pitch which contribute definite notes to the harmony of the score, and (*b*) those of indefinite pitch which serve to mark the rhythm and add the tumult of festivity to the orchestra.

(*a*) Of definite musical pitch:
- Kettledrum.
- Bells.
- Celesta.
- Glockenspiel.
- Harmonica.
- Parsifal Bells (designed by Dr. Mottl).

(*b*) Of indefinite musical pitch:
- Bass Drum.
- Side Drum.
- Triangle.
- Cymbals.

I. THE KETTLEDRUM

German, Pauken. *French,* Timbales.
Italian, Timpani.

THE kettledrum belongs to the class of instruments of percussion having a definite musical pitch.

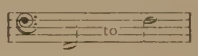
Construction.—This instrument consists of a piece of vellum stretched tightly over a hemispherical shell or pan of copper or brass, by means of screws working on an iron ring which fits closely round the head of the drum. The vellum is slackened or tightened at will, thus producing any one note within its compass of an octave. As each drum can give but one note at a time, and it takes some little time to alter all the screws, two or three kettledrums, often more, each tuned to a different note, are used in an orchestra or band.

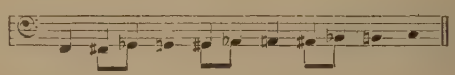
Various mechanisms have been tried to facilitate the changing of pitch, such as working the screws by means of a pedal, but the simpler model is generally used in orchestras.

This is the only instrument of the drum family which can be tuned to any definite musical sound, and its notes are as nearly definite as the pizzicato tones of the double bass.

Production of Sound.—Two sticks are used to play the kettledrum, and these are of various kinds. The best are made of whalebone for elasticity, with a small wooden button at the end, covered with a thin piece of fine sponge. Others have a felt or india-rubber knob. Some are even made with a wooden uncovered knob, but are only used in exceptional cases to produce a harsh, noisy tone. The kettledrum is struck at about one quarter of the diameter from the ring.

Compass.—Kettledrums can be tuned to any note within the compass of the octave.



They are of two sizes and of two different pitches. The larger instrument, which it is not advisable to tune below F if a distinct and definite note is required, takes any one of the following notes:

and the smaller, which, if made higher than the following limit, would sound poor and thin and might cause the vellum to burst, is tuned to the following:

When there are only two drums, the tonic and dominant or the tonic and subdominant are generally chosen, being the notes which enter into the composition of most of the chords of the key. The bass clef is used in notation.

The kettledrums used to be treated as transposing instruments, the music being written as for the horn in C, the key to which the drums were to be tuned being indicated in the score; now, however, composers write the real notes for them, but without accidentals.

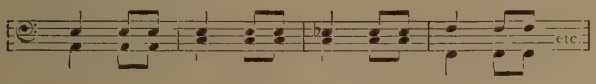
Quality of Tone and Possibilities.—The tone of a good drum in all but its extreme notes is sonorous, rich, and powerful. A harsh, overpowering quality can be obtained when noise rather than music is required, by using uncovered drumsticks.

The drums can be covered or muffled by placing a piece of cloth over the vellum to deaden the sound; this device produces a mournful tone most effective in orchestration.

By judicious scoring for this instrument, beautiful effects can be obtained in rolls, in crescendo and diminuendo, or in forte and pianissimo passages. A great variety of rhythmical figures, on one note, or in intervals with two or more notes, can be produced.

Passages in double notes such as the following, as well as many more complicated, will give an idea of

the capabilities of an instrument whose technique is even now developing.



This instrument has been used very effectively by Mozart and Mendelssohn, and Berlioz has introduced into his "Requiem" as many as eight pairs of drums, which require as many as ten drummers. Meyerbeer, in his opera of "Robert le Diable," wrote an entire melody, a march, for four kettledrums. Beethoven was the first to see that they might be used as solo instruments. The term drum used by musicians means the kettledrum, never the bass or side drum.

Origin.—From Egyptian, Assyrian, and Indian sculptures we have full evidence of the great popularity of drums of all kinds among the ancients. How the kettledrum reached Europe is a matter of some conjecture; some suggest through the Romans, as the Greeks knew the side drum, which they called tympanum. They or the Romans may also have known the kettledrum. Others attribute its introduction to the Moors of Spain. It was used in Germany from early times. The first mention of its use in England appears to be in Froissart's description of the entry of Edward III into Calais in 1347. Of the words used for drums in the Middle Ages, nacaire, tambour, tympan, and tambale or tabale, all but tympan, from the Latin tympanum, are derived from the Arabic words tambur, tubal, and neggareth, which seems to point to a Moorish origin of the kettledrum. The next mention of the use of this instrument in England occurs about 1606, in Nicholls's "Progression of James I": "The King of Denmark's grume, riding upon a horse, with two drumes, one on each side of the horses' necke, whereon he strooke two little mallets of wood, a thing verie admirable to the common sorte, and much admired."

The earlier manner of bearing the instrument was to suspend it from the neck of a man, who on the march bore it on his back in front of the drummer. In a miniature of an illustrated manuscript at the British Museum, an Eastern banquet is depicted in which the potentate is enjoying the music of various instruments, and among them two kettledrums strapped to the back of a Nubian slave. This manuscript dates from the fourteenth century, and is by a skilled Genoese. The kettledrum was first used in an orchestra by Lulli, in the reign of Louis XIV, and it has kept its place ever since.

II. KETTLEDRUM WITH INSTANTANEOUS SYSTEM OF TUNING

THE kettledrum in this form differs substantially from the ordinary drums.

Construction.—The construction differs from that of the kettledrum tuned by means of screws in the following particulars: A simple mechanism in the interior, consisting of a system of cords regulated by screws and rods, is worked from the outside by means of a handle. Some kettledrums have a little dial on whose face are 28 notches, each numbered, enabling the performer to tune the drum instantly to any note within its compass, by remembering the number that corresponds to each note, and pointing the indicator to it on the face of the dial. Of course the cords may stretch in time, flattening the pitch and causing the representative numbers to change. Temperature has a similar effect upon the pitch. Should a performer therefore find at a concert, for instance, that the heated atmosphere has put his drum out of tune, he need only turn the handle one or more notches to the right to bring his instrument back to pitch.

Each drumhead is capable of giving a compass of about half an octave; it will, therefore, be seen that each note has more than one notch at its service. Should the indicator point to No. 28, and yet by reason of the stretching of the cords the instrument be not sharp enough, another turn or two to the right, beginning again at No. 1, can be given, which will have the desired effect. To slacken the head, the handle must be turned to the left and a little catch lifted.

As this drum can be tuned in a moment by means of the dial to a certain note, there is no occasion to keep the head taut when the instrument is not in use.

Quality of Tone.—The little interior mechanism, which is of an elastic nature, has no detrimental effect on the tone, but on the contrary tends to increase its volume and improve its quality. The body of the drum, which acts as a sound-box in increasing the tone, has a sound-hole underneath.

Constantly new effects are being evolved from the kettledrums, simple as their tone-color seems to be. Wagner often employed them, in soft irregular strokes (entirely alone), to picture anxiety, suspense, or terror, as in "The Flying Dutchman" at the first meeting of Senta and the hero, in "Lohengrin" at the death of Telramund, etc.

Richard Strauss in his "Elektra" caused them to be struck with birch rods, to make a peculiarly strident tone.

III. ORCHESTRAL BELLS

GLOCKENSPIEL, HARMONICA, XYLOPHONE, CELESTA

Italian, Campanelli. *French,* Carillon.

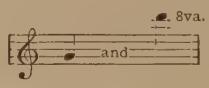
THE bells belong to the class of instruments of percussion with a definite sonorousness, and are of various forms and kinds, according to the use to which they are put. Bells are scored for either to mark the rhythm and add brightness and piquancy to music, or for the purpose of imitating church or other bells; it is with the former that we are chiefly concerned here, and for them the word bell is generally a misnomer, other shapes of metal or wood having been found more convenient. The term Glockenspiel is understood to mean a set or frame of bells that can be easily played by one performer by means of steel hammers.

Construction.—The pyramid-shaped Glockenspiel consists of an octave of semitone hemispherical bells, placed one above the other, and fastened to an iron rod which passes through the center of each. They gradually become smaller as the pitch rises, which

gives the instrument the shape of an elongated pyramid.

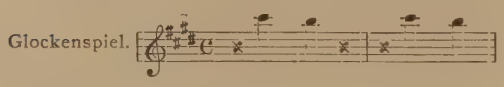
The lyre-shaped Glockenspiel, carillon, or harmonica, a newer model which has now replaced the pyramid-shaped, has instead of bells twelve or more bars of steel graduating in size according to their pitch. These are fastened to bars of steel which follow the same direction as the strings in a lyre, and are set perpendicularly in a steel frame in the shape of a lyre. This harmonica is played by means of little steel hammers attached to whalebone sticks.

Compass.—The compass of this instrument lies between



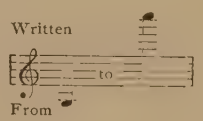
(real sounds), or even higher.

Quality of Tone.—Wagner has exercised exquisite judgment in the use of this instrument, notably in the Fire Scene of "Die Walküre" (last act), and in the Peasants' Waltz in the last scene of "Die Meistersinger."

Feuerzauber. "Die Walküre." Act III.

Sounded an octave higher.

The quality of tone given by these instruments is penetrating, clear, and sparkling. Mozart uses the Glockenspiel prominently for an entire melody in his "Magic Flute."

The xylophone is made of little wooden staves, each like a half-cylinder, resting on two wooden bars often covered with straw, and arranged in such a manner that each half-cylinder or semitone is isolated. The xylophone is played with two little wooden hammers, and has a compass of nearly or quite three octaves, according to the makers.

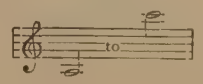


Sounded an octave higher.

The quality of tone is inferior to that of the preceding instruments and is not so clear.

The keyed harmonica is a fourth form of this little instrument and consists of a keyboard, to each note of which a little hammer is attached, which strikes a bar of glass when the key is depressed.

This harmonica has a compass of over two octaves, from



Sounded an octave higher.

It is used of necessity when chords are written for the Glockenspiel, as in Mozart's "Magic Flute," otherwise more than one player would be required, but chords do not often sound well on the bells owing to the inequalities of tone in the different notes. It is possible to produce various effects, scale and arpeggio passages, in single or double notes, on the keyed harmonica.

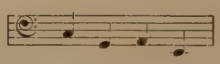
Mozart, Handel, Gluck, Meyerbeer, Berlioz, Wagner, and Saint-Saëns have scored for these instruments.

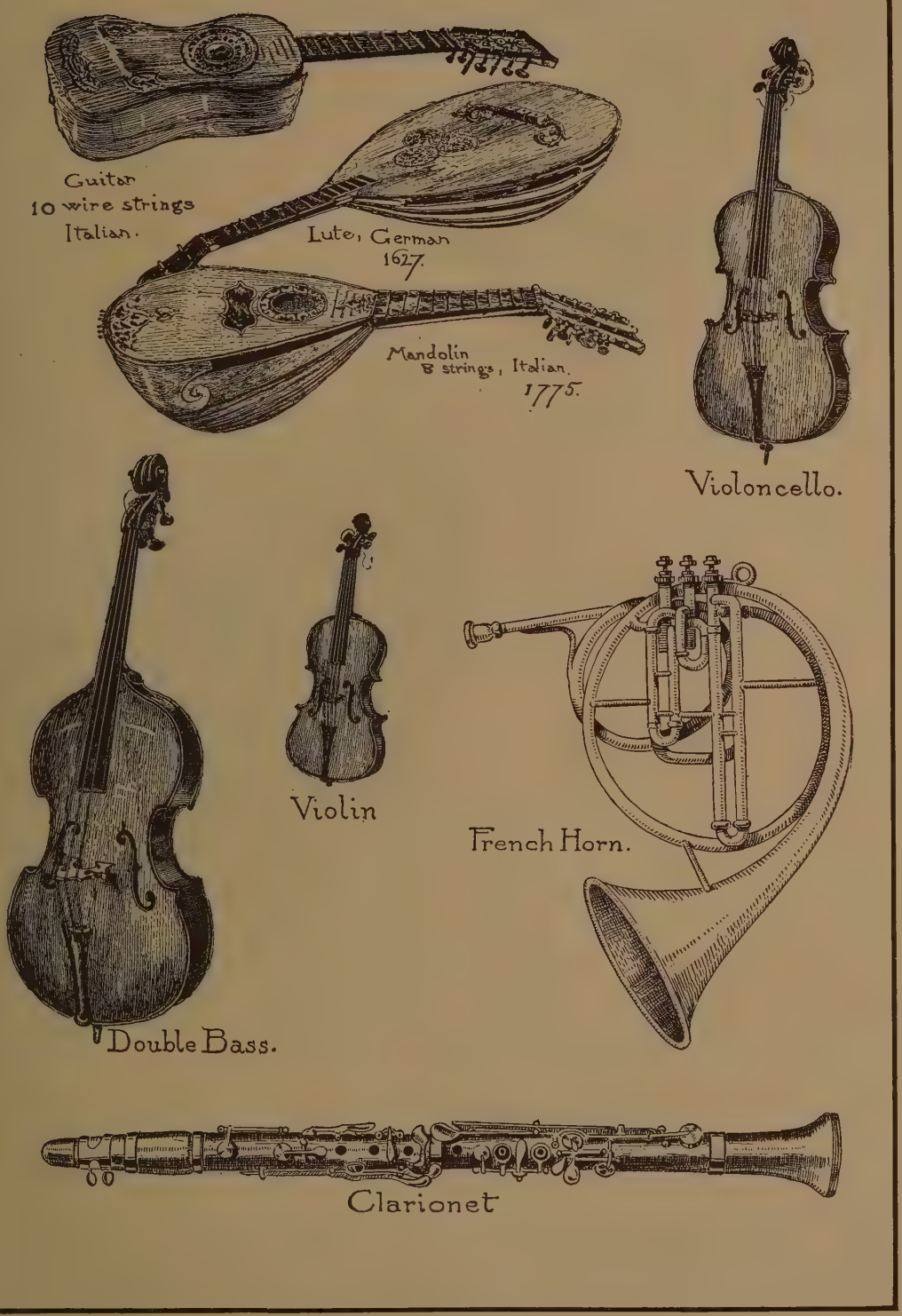
THE CELESTA

The celesta, used by Richard Strauss and others, consists of a set of bells, played by a keyboard, and contained in a case much like that of a cabinet organ. It consists of bars or plates of steel hung over resonating boxes of wood. The bars are struck by hammers. The celesta was invented in 1886 by Auguste Mustel, of Paris. Its tone is much sweeter and fuller than that of the Glockenspiel. Tchaikovsky was much impressed by it and wrote a whole melody for it in his "Casse-Noisette" ballet—the Dance of the Sugar-plum Fairy, "La Fée Dragée." This was its first prominent use, but since then it has been copiously employed in modern scores. It has about the same compass as the keyed harmonica.

IV. THE BELLS

GONGS, TUBES, "PARSIFAL" BELLS

IN some dramatic works composers have wished to imitate the sound of church bells, as for instance in Sir Arthur Seymour Sullivan's "Golden Legend," Verdi's "Trovatore," Mascagni's "Cavalleria Rusticana," Leoncavallo's "Pagliacci," Wagner's "Rienzi" and "Parsifal." It is evident that in these cases larger bells, of a deeper sound than the foregoing, are necessary. This effect is somewhat difficult to attain satisfactorily, for the following reasons: Large bells of a very low pitch are too cumbersome and heavy for the orchestra; the notes are often impure and obscured by the dissonant harmonics; and bells large enough to give the notes required for "Parsifal" would overpower

the orchestra with their volume of sound. Various substitutes have been tried, but of course no other instrument gives a tone in the least similar to that of the bell, which independently of the harmonics has two distinct simultaneous notes: first, the tap tone which gives the pitch and is dependent on the manner in which the bulk of the metal is disposed in casting the bell, as well as on the quality and proportions of copper and tin used; secondly, the hum tone, or lower accompanying note, whose interval from the tap tone varies in different bells according to pitch and the taste of the maker, but on which the purity of the tone of the bell greatly depends. A flattened major seventh below the tap tone is generally found to give the best results in a deep bass bell. The hum tone is governed



A GROUP OF INSTRUMENTS

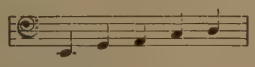
From Drawings by Harry Fenn

by the relative proportions of the shape given to the bell.

In a letter written on the subject of the bells at Madame Wagner's request, Herr Julius Kniese, of Bayreuth, says that in order to obtain the effect of deep church bells as scored by Wagner in "Parsifal," the following combination was adopted: (1) A large stringed instrument with four keys; (2) four tom-toms or gongs tuned to the pitch of the four notes; (3) a bass tuba which plays the notes staccato in quavers, to help to make them more distinct; and (4) a fifth tom-tom on which a roll is executed with a drumstick. The steel tubes were tried, but as their pitch was two octaves too high, they sounded tinkly, and introduced an element foreign to the noble music of the Grail; they were therefore abandoned.

Construction and Production of Sound.—The "Parsifal" bell instrument has been constructed somewhat on the principle of the grand piano; the massive frame is shaped like a long dining-table, and rests on four solid feet; the soundboard is of spruce fir strengthened underneath by belly bars. There are thirty strings in all, mostly covered with copper wire; six to each note, of which three are in unison and give the fundamental note, and three an octave higher. The mechanism is simplicity itself. There is no action; the strings are struck by large wooden hammers, thickly and loosely covered with cotton-wool, which the performer sets in motion by a strong but elastic blow from his fist. The hammers are fastened to arms about twenty-two inches long, fixed by screws to a strong wooden span bridge, placed horizontally above the strings at about two-fifths of the length from the front; on the front of the arm is the name of the note, and farther back the green felt ledge struck by the fist. To control the rebound of the hammers, a strong wooden bar on two arms, fastened also to the span bridge, overhangs the notes. Two belly bridges and two wrest-plank bridges, one set for each octave, determine the length of the strings, and the belly bridge, as in other stringed instruments, is the medium through which the vibrations of the strings are communicated to the soundboard. The strings are fastened to thirty equidistant pegs at the farther end of the instrument, and to five groups of wrest-pins firmly set in an iron wrest-plank in the front of the instrument. The back of the instrument is strengthened by an iron plate and four iron pillars to resist the tension of the strings.

Compass.—The bell instrument has five notes. The



D, which is not required for "Parsifal," is used in the "Cavalleria Rusticana" in conjunction with the A.

Quality of Tone.—The quality of tone is rich, powerful, and noble, and carries well. It is clearly a good substitute for church bells in the orchestra, since it preserves the dignity of the atmosphere, which is destroyed by the triviality of all Glockenspiels and tubes.

There have, however, recently been much larger and deeper steel tubes placed upon the market, and these give both the clangor and solemnity of the large bell very satisfactorily. They have been successfully employed in Tchaikovsky's "1812" overture.

V. INSTRUMENTS OF INDEFINITE MUSICAL PITCH

THE BASS OR BIG DRUM

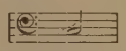
French, Grosse Caisse. *German,* Grosse Trommel. *Italian,* Gran Cassa or Tambura.

UNDER this head several instruments, of various degrees of importance, are to be considered, and first in order is the bass drum.

Construction.—The bass drum consists of a short wooden cylinder, of a very wide diameter, covered at both ends by vellum stretched over small hoops, kept in place by larger hoops. The two large hoops are connected by a cord passing in zigzags from hoop to hoop. These cords, and with them the large hoops, and therefore the vellum, are tightened and slackened by means of leather braces. Systems of rods and screws are also used for the purpose. In the orchestra the bass drum is mounted on a stand.

Production of Sound.—The bass drum is struck in the center with a stick, ending in a large, soft, round knob. This instrument does not need tuning, but the pitch may be made acuter or deeper, according to whether a rich full tone, or a mere dull thud is required, by respectively tightening or loosening the braces. The instrument can also be muffled by covering it with a piece of cloth.

Notation and Possibilities.—The music is written



generally on a stave with the bass clef, the C being used to show the rhythm and accents. Sometimes, however, no stave is used, a single note on a single line being found sufficient. The bass drum has a place in every orchestra, but the more sparingly it is employed the better. Its use is to accentuate the rhythm. It is possible to make gradations in forte and piano, and to play eighth and sixteenth notes when the tempo is not too quick. A roll can be played by holding a short stick, furnished with a knob at each end, in the middle, and striking alternately with each end; or, better still, by using two kettledrum sticks. It is significant that Wagner has not once scored for the bass drum since he composed "Rienzi"; but other composers, Verdi, Gounod, Berlioz, and Sullivan, have used it very effectively.

Origin.—The popularity of all kinds of drums in the most ancient civilizations is established beyond doubt by the numerous representations of the instrument, in great varieties of size and shape, on sculptures and paintings of Egypt, Assyria, and India. The tympanum, a very shallow side or bass drum, was known to both Greeks and Romans, and through them its use spread all over Europe. The tympanum was certainly known in England long before the crusades, for Bede mentions it in his list of instruments. Its use for military purposes in England possibly dates from the reign of Richard I, who had become accustomed to

drums in the crusades. The drums were slung to the back of a man who walked in front of the drummer. Side drums were of a much larger size than they are now, till the reign of Elizabeth, and were held horizontally, and beaten, of course, on one head only. How early the use of snares was known is uncertain, but Prätorius and Mersenne both mention them (early seventeenth century). Marais (1656-1728) was, as far as we know, the first to score for the side drum, in his opera "Alcione." Gluck used it in "Iphigénie en Tauride," and other composers have occasionally followed this example.

THE SIDE OR SNARE DRUM

French, Tambour Militaire. *German,* Militär Trommel. *Italian,* Tamburo Militare.

Construction.—The side drum consists of a small wooden or brass cylinder with a vellum at each end. The parchments are lapped over small hoops, and pressed firmly down by larger hoops. These and the vellums are tightened, as in the bass drum, either by cords and leather braces, or by rods and screws. Across the lower head are stretched several catgut strings, called snares, which produce a rattling sound at each stroke on the upper head, owing to the sympathetic vibration of the lower head, which jars against the snares.

Production of Sound.—The drum is struck in the center by two small sticks with elongated heads, or knobs of hard wood, which produce a rasping sound. The roll is produced by striking two blows alternately with each hand quite regularly, and very rapidly, which gives a rattling tremolo sound. The side drum can be muffled by loosening the cords, or by inserting a piece of cloth or a silk handkerchief between the snares and the parchment; this produces an uncanny sound. The tenor drum is very similar to the side drum, but is made only of wood, and has no snares. The side drum is used in orchestra to give a military color to the music. The origin of the instrument has been given with that of the brass drum.

THE TRIANGLE

German, Triangel. *French,* Triangle. *Italian,* Triangolo.

The triangle is a triangular rod of steel, open and curved slightly at one corner. The triangle is played by means of a steel stick with a wooden handle. Varied effects of rhythm and different grades of forte and piano can be obtained. A sort of tremolo can be produced by striking each end of the triangle alternately in rapid succession. The treble clef is used when the triangle is scored for on a separate staff, but when its music is the same as for the big drum, the bass clef is used. The tone is clear and ringing, but should have no definite pitch, and for that reason small triangles are best, as large ones give out a definite and disagreeable note. The triangle is suspended by a loop. This instrument is used to mark the rhythm, but even more as an embellishment. Beethoven, Mozart, and many other classical as well as modern composers, have made use of this little instrument in some of their works. Weber has used it prominently in Gypsy music, as, for example, in his "Preciosa."

CYMBALS

German, Becken. *Italian,* Piatti or Cinelli. *French,* Cymbales.

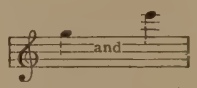
Construction.—Cymbals consist of two thin round plates of copper and tin alloy, with a handle strap in the middle of each for holding them. The sound is obtained not by clashing them together, but by rubbing their edges together by a sliding movement. Sometimes one is held in the left hand by a strap and struck with the soft stick of the bass drum, which produces a sound akin to that of the tom-tom. A weird, savage effect can also be produced by holding one cymbal suspended by the strap, and letting the drummer execute a roll on it as it swings.

Possibilities.—All shades of forte and piano can be obtained. When the cymbals are to be allowed to vibrate, the composer indicates this by writing, "Let them vibrate." "Damp the sound" is his direction if the contrary effect is desired. To do this, the player presses the cymbals against his chest as soon as he has played the note, which stops the vibrations. The duration of the vibration is indicated by the value of the note used on the staves; its name signifies nothing, as the pitch of the cymbals is indefinite. This instrument plays the same music as the bass drum, unless otherwise indicated by "Senza piatti," or "Piatti soli." Cymbals are to be found in all orchestras, though they are but occasionally required. They are useful for marking the rhythm, and for producing weird, fantastic, or military color; their shrill, quivering notes are heard above those of all the other instruments playing fortissimo. Cymbals are unrivaled for giving the effect of frenzy, fury, or of a bacchanalian revel, as in the "Tannhäuser" Venus music, or in Grieg's "Peer Gynt." When damped, a sinister impression of dire misfortune is conveyed.

Origin.—The origin of the cymbals is prehistoric, and they are found depicted on mural paintings and sculptures of the highest antiquity; their construction is so simple, and their possibilities so limited, that they have undergone little change or development.

THE ANCIENT CYMBALS

This instrument belongs to the class of instruments of percussion with a definite musical pitch. The ancient cymbals are very small, resembling shallow bells; they are made of much thicker metal than the modern cymbals, and give out a distinct note tuned to one of the notes lying between



They are played in the same manner as the modern; their sound is sweet but powerful, like that of the keyed harmonica. They are rarely used in the orchestra now.

THE PAVILLON CHINOIS, OR CHAPEAU CHINOIS TURKISH CRESCENT, OR JINGLING JOHNNY

German, Schellenbaum or Türkischer Halbmond.

The pavillon chinois, an instrument of percussion incapable of producing definite musical tones, was formerly used in military bands, but never in the orchestra, where an instrument of somewhat similar form, the lyre-shaped Glockenspiel, often confused with the pavillon chinois, is used to mark the rhythm. The pavillon chinois consists of a pole about six feet high, surmounted by a crescent and star and conical metal cap or pavillon hung with small bells. Under the pavillon is a squat lyre, or fanciful double crescent, likewise hung with tiny bells and long streamers of horsehair. The pavillon chinois is played by shaking the pole up and down and jingling the bells.

FOURTH SECTION

FAMILIAR NON-ORCHESTRAL INSTRUMENTS

I. THE GRAND PIANOFORTE

German, Flügel. *French,* Piano à queue. *Italian,* Piano a coda.

THE piano belongs to the class of stringed instruments with keyboards.

Construction.—The outward appearance of the piano in all its varieties of square, upright, grand, concert grand, etc., is too well known to need description. This instrument possesses keys sufficient for a chromatic scale throughout its compass; each note is provided with one, two, or three strings in unison (according to the pitch, the medium and high register usually having three), a hammer and a damper (except the two highest octaves, which have no dampers), besides a complex system of mechanism called the action. The chief parts of a pianoforte, about which it imports us to know something, are: (1) The case and framing; (2) the strings; (3) the wrest-plank; (4) the soundboard or belly; (5) the bridges; (6) the action; and (7) the pedals. The last will be treated in *Production of Sound.*

1. The case, made of solid wood, with a veneering of mahogany or oak, must be so strongly constructed as to resist the enormous tension of the strings—approaching thirty tons in a modern concert grand. To that end concurs the cast-iron or steel frame placed over the soundboard, which has strong iron or steel bars (the number varying with different makers) extending across the strings, from side to side of the frame but not touching them. Holes of irregular shape are made in the metal frame for the sake of lightness.

2. The strings are now made of the strongest and, at the same time, the most elastic of metal, tempered cast-steel wire, which is able to meet a tension of at least 200 pounds for each string in recent grands. The pitch of the strings depends on their diameter as well as their length. In order to reduce the latter for the bass strings, the expedient of covering them with copper or white metal wire has been resorted to, as in the G string on the violin, for example. The earliest stringed instruments, with keyboards, of which we have any knowledge, seem to have made their appearance in Europe about the middle of the fourteenth century, contemporaneously with the first manufacturers of drawn iron wire at Nuremberg.

3. The wrest-plank, corresponding to the peg-box of violins, will be found in grand pianos at the keyboard end under the music rest. Into it are inserted the wrest or tuning pins. In order to bear the strain of the enormous tension, the wrest-plank is made of layers of the hardest woods—oak, beech, etc.—in each of which the grain runs at right angles to that of the others to prevent splitting. The whole is further strengthened with a metal plate, to assist in insuring the rigidity of the tuning-pins.

4. The soundboard consists of lengths of spruce or fir, glued together, like that used for the best violin bellies, chosen on account of its elasticity and resonant power, and to both sides of which several coatings of varnish are applied to prevent cracking or warping. The soundboard, which is slightly convex to the strings, lies under them along the whole length and breadth of the piano nearly as far as the wrest-plank. Between the soundboard and the wrest-plank there is a narrow space left, through which the hammers rise to strike the strings. Strings, when set in vibration, give but a poor sound of themselves, owing to the small surface they possess wherewith to influence or set vibrating the surrounding strata of air. But when the strings rest on a wooden bridge, the molecular vibration communicated to them by the fingers through the keys and the hammers is transmitted by the bridge to the soundboard in shocks, which are repeated by the surrounding atmosphere. Thus are sounds produced, the intensity and character of which are directly governed by the quality of the blow or pressure brought to bear upon the strings by the performer.

The vibration of the soundboard as a whole being undesirable, it is prevented by gluing thin ribs of wood—the belly bars—under it, of which the grain runs in a different direction to that of the soundboard. These bars give elasticity and help the formation of vibrating centers or nodes. The soundboard has to be tense to take up the vibrations initiated by the strings.

5. The bridges are two in number in the piano, each corresponding to a similar part of the violin, i.e.: (1) the belly bridge to the violin bridge; (2) the wrest-plank bridge to the nut of the peg-box of the violin. The first of these bridges, by means of which the vibrations of the strings are communicated to the belly, is made of hard wood. The belly bridge is divided in all pianos, straight or overstrung. With the

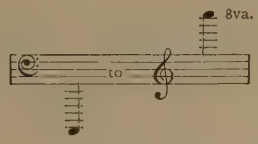
latter the divisions are disposed at differing angles, so that the bass bridge strings cross over the others in the lower part of the scaling. As a matter of fact, overstringing has entirely changed pianoforte construction. The steel strings are stretched over the longer part, and the covered bass strings (lying above the steel ones) rest on the shorter bridge behind the other and nearer the end of the case. The wrest-plank bridge, to which the strings are pinned down to prevent their being forced upward by the blow of the hammer, is the point from which the vibrating length of the string is measured.

6. The action, situated beyond the keys under the wrest-plank, comprises the complex system of levers, hammers, checks, dampers, etc., which are set working when a key is depressed. To describe minutely this action, which differs in details according to the various makers, is not possible within our limits. The hammers are covered with the finest white felt, and resemble in shape a section out of the middle of a pear. The checks are situated just behind the hammers. A damper made of thick felt lies over or under each set of three strings in unison.

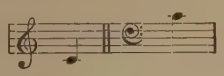
Production of Sound.—By depressing a key with a finger, a system of levers is set working which raises the hammer and causes it to strike the strings and then rebound. In the earliest action by Cristofori, there was nothing to control this rebound, and the key would have to rise to its level of rest before another sound could be elicited. The inventor noticed this defect, and remedied it by placing behind the hammer to control it a piece of hard leather which acted as a check. This check-action has been developed and perfected in our days, culminating in the double escapement action. The damper, which is automatically removed from the string as the key is pressed down, likewise returns to its normal position on the string as the key rises, and thus stops further vibrations after the finger leaves the key. Should the performer, however, wish these vibrations to continue, he can, by means of the right pedal, the "loud pedal" as it is frequently miscalled, which is indicated by "ped" under the note, remove the dampers and thus call out the sympathetic upper partials or harmonics of the strings, as well as prolonging the tone.

The soft pedal, on the left side, indicated by "una corda" and released at the words "tre corde," shifts the hammers so that instead of three strings, they only strike two, formerly one; the soundboard, which lies directly under the strings, sets up a series of sympathetic vibrations from the other two only, which gives a mysterious, veiled quality to the notes. Some pianos, instead of having this "shifting action," have a piece of felt, which, being interposed by the action of the pedal, softens the impact, and deadens the sound. Many upright pianos move the hammers nearer the wires, thus causing a shorter stroke, and consequently a softer tone.

Compass.—The compass of a full-sized modern piano is seven and a quarter octaves, from subcontra A to five-lined C, according to piano nomenclature. The full octaves, beginning with the lowest C, are called contra, great, small, one-lined, two-lined, three-lined, and four-lined. The deficiency in length in the bass strings is balanced by extra thickness, while in the treble, with modern high tension scale, the length is greater in proportion.



Two staves are required in notation, the bass and treble clefs being used. No exact limits to each stave can be given, but middle C



is the nominal boundary.

Quality of Tone.—This is subject to so many conditions that it is impossible to do more than refer to a few of them. The tone varies according to the different makers, some making brilliancy and clearness, some mellowness, others a sweet, singing tone their specialty, and so on. The various kinds of touches are more influential than anything else in producing tone (by tone, we mean breadth, depth, and fullness of sound, which is quite independent of loudness). Given an instrument of the very best, two performers playing the same composition on it may give a totally different idea of its tone; the one producing plenty of sound in the forte passages, but leaving the ear unsatisfied, on account of a certain hardness and want of elasticity and continuity in the sound; the other performer giving the piano a voice, and making it sing out round, deep-chested notes in which there is no suggestion that the keys have been struck, but rather that the sound is being pressed out of the instrument. No satisfactory elucidation of the mystery of this difference of touch has been brought forward. The fact that so many and minute differences of touch and shades of expression—nay, more than this, that the individual *feelings* of performers can be transmitted to the piano through the keys, will give an idea of the exquisite nicety and complexity of the mechanism which makes this possible.

Possibilities.—There is no instrument which has greater possibilities than the piano. The rapid development of its technique, and the wonderful improvements that have followed in such quick succession during its comparatively short existence, all point to a more and more glorious future for it. The fact that from this instrument one performer can by himself produce the richest and most complete harmonies, and that he requires to devote so much intelligence and care to the study, in order to follow out simultaneously the many parts of these harmonies, instead of each part being taken by a different instrument—all this adds to its dignity and importance. On the name of Muzio Clementi rests the honor of having, in 1770, founded a technique for the piano.

History.—The piano, being a truly complex mechanism, has many so-called prototypes in antiquity. The two chief classes of keyed predecessors are: 1. The clavichord. This was a small instrument in which the strings were struck from below by metal tongues

called tangents. While a key was held down, its tangent was pressed against the string near one extremity, thus forming one end of the vibrating part of the string. Swells and subsidences could be caused by increasing or diminishing the pressure on the key while it was held down. These changes were called the Bebung. The tone of the clavichord was infinitely sweet and delicate, and it is no wonder that Bach and others clung to it even after the invention of the piano. 2. The harpsichord, with its smaller varieties, the spinet and the virginal, or virginals. In the harpsichord the strings, two or three for each note, were plucked by quills carried on jacks that were pushed up when the keys were depressed. The harpsichord often had two manuals, or keyboards, and as many as six pedals. The latter, besides acting like those of the piano, included also some couplers, which could unite the two manuals or make a note sound its octave as well as itself. The damper pedal operated by moving some of the jacks until their quills could no longer pluck the strings. The harpsichord could give a greater variety of effects than the piano, but its tone was never so full or strong as that of the later instrument. The spinet was a very light harpsichord with one keyboard, and the virginal merely a box, with keyboard, which could be laid on a table. The mechanism of the two last-named instruments was similar to that of the harpsichord.

These instruments in turn were evolved from the psaltery, an instrument having strings stretched horizontally over a soundboard, and plucked by plectra or quills. The harp supplied the idea of having a separate string for each note, and the harplike shape of the scaling; the monochord of the Greeks and the Middle Ages (by which name clavichords were called in France, Italy, and Spain at one time) supplied the idea of the bridges dividing the length of the strings; while the dulcimer and cembalo of the Arabs and Hungarians supplied the idea of the hammer-action.

The earliest mention of the name "pianoforte" applied to a keyed instrument seems to be in 1598, in the letters of a musical instrument maker named Paliarino, addressed to Alfonso II, Duke of Modena. It would seem, however, that the name was applied to some instrument of the clavichord or cembalo kind, for there is no mention of how the tone was produced, nor do we hear of the *piano e forte* again till 1711, in an account by Scipione Maffei, of Cristofori's "gravecembalo col piano e forte." Bartolommeo Cristofori was a harpsichord-maker, of Padua. Invited to Florence by Ferdinando de' Medici, and encouraged by him, Cristofori produced the first pianoforte, in which the two unison strings for each note were struck by hammers, and damped by pieces of cloth or felt; the check-action was added afterward. Others living at the same period claimed to be the real inventors—Schröter, of Dresden; Marius, of Paris; and Silbermann, of Freiberg. It is not impossible that the same idea may have occurred to more than one man quite independently. Cristofori was probably not the first who had attempted an instrument of this description; his invention was the result of years of study in his own lifetime and that of preceding generations. It is now proved beyond contention, however, that Cristofori alone was the actual inventor. Johann Sebastian Bach had two pianos by Silbermann submitted to him in 1726, but his judgment was unfavorable; the treble was too weak, the touch too heavy. We hear, however, that he played on one bought by Frederick the Great in 1746. He stated then that he considered the instrument only fit for rondos and that class of music.

The first public mention of the pianoforte in England was in 1767, in a Covent Garden playbill, in Messrs. Broadwood's possession, in which it was announced as a new accompanying instrument. Pianos were imported into America soon after this.

The first real damper "loud" and soft pedals were adapted in 1783 by John Broadwood to the piano; they had been invented for the harpsichord, instead of hand-stops, by John Hayward, about 1670. At first the piano was looked upon as a variety of the harpsichord; its emancipation took place between 1770 and 1780, when it became an independent instrument, chiefly through the exertions of Muzio Clementi, who understood its capabilities. But it was Beethoven who first turned the tide from harpsichord, spinet, and clavichord to the acceptance of the piano.

In 1778 John Broadwood made a new scale grand, dividing the soundboard bridge. Stein, of Augsburg, invented the soft pedal with shifting action in 1789. Tension bars were first applied to a grand by James Broadwood tentatively in 1808, and in 1827 he patented a grand in which tension bars and string-plate were combined. In 1837 Jonas Chickering, of Boston, patented the first practical casting of a full iron frame to resist the tremendous tension of the instrument. Other important improvements of this were patented by him in 1843 and 1845. Meanwhile the invention by Sébastien Erard in 1808 of the double escapement action had been perfected and was patented in 1821 by his nephew, Pierre Erard. The hammer-touch ultimately brought about a double improvement in playing and construction: (1) In using the wrist to soften the blow which the indifferent and thin wire strings were too weak to bear; (2) by giving the idea of using an iron frame to which to fasten the strings, as the wooden frame would not bear the increased tension of stronger and thicker strings.

Boehm, the flute-maker, was the first to have the idea of overstringing pianos in 1831, but the invention as applied to grands was patented by Steinway & Sons, in connection with a cast frame, in 1859.

In 1838 the harmonic bar was introduced by Pierre Erard. By making the treble part of the instrument almost immovable, it favored the production of the higher harmonics in the treble. The firm of Broadwood have since made use of a similar bar across the whole length of the wrest-plank. In 1847 Henry F. Broadwood invented a grand having an entire upper iron framing with only two tension bars. Pursuing this rejection of metal bars, Henry J. Tschudi Broadwood patented in 1888 a barless grand, which is now proved to stand the modern tension satisfactorily. It is in the reduction of weight that this invention will be valued in the future.

Innumerable other improvements have since been patented by Steinway & Sons, Mason & Hamlin, and many other firms of piano manufacturers; the sostenuto pedal, the agraffe, the supported soundboard, etc., are among these.

The harpsichord had a place in every orchestra till the end of the eighteenth century; the last great public performance at which it was used being that of Mozart's "Magic Flute," in 1791; after that time it was superseded by the pianoforte in the orchestra. Until about 1820 the director of the opera or concert sat at the piano, following from the score and occasionally joining in; the first violin or "leader" gave the tempi with his bow. Spohr was one of the first to break through this custom, when at a Philharmonic concert, in 1820, he boldly stood up with a baton, faced the orchestra with the score on the desk before him, and beat time regularly from beginning to end of the symphony. This method of conducting was found so successful that it was immediately adopted in England. But the baton was used on the Continent some years before this, as stated in the earlier part of this section.

The organ, which is a keyed wind instrument, is described under its own name.

II. THE ORGAN

THE organ (Gr. *organon,* an instrument) is an instrument provided with one or more keyboards, and generally a set of pedals, also a number of metal or wooden pipes which are made to sound, in performance, by wind (air) pressure from bellows or other source of compressed air. Space forbids a full description of all its mechanical devices. Large organs to-day usually have four divisions and manuals (hand keyboards), besides the pedals. The manuals belong to the different departments of great organ, swell-organ, choir-organ, and solo-organ, the pedals forming the pedal organ. Each department is practically a separate instrument, but all are grouped so as to need but one performer. The manuals are arranged in an ascending row before him, and the pedals are placed at his feet. Many organs have three manuals, for choir, great, and swell organ, and a set of pedals. The compressed air from the bellows is conveyed through a wind-trunk to the wind-chest, each department having its own wind-chest. Attached to the top of the wind-chest is the upper board, arranged to control the entrance of the wind into the pipes. The pipes are set in the upper board, ranged in rows so that all pipes of the same pitch are in one line, while all of the same quality (register, stop) are in a line at right angles to the first line. Beneath the upper board are grooves, each running horizontally backward in a line from its corresponding key on the keyboard. When a key is pressed down, a valve (pallet) is opened, and the wind thus allowed to enter the groove of that key. This would cause all the pipes of that pitch to sound but for the intervention of another mechanism. There is another set of grooves, at right angles to the first, and each of these is a cross-slide, which the player can move to and fro at will by means of the draw-stops. When he pulls a stop out into the proper position for playing, he causes the cross-slide to move just enough so that certain holes in it will be brought opposite to the openings of the pipes. Thus the wind from the wind-chest, when allowed to enter the key-groove as the key is pressed down, cannot get into any of the pipes of that pitch unless their cross-slides have been previously moved into position by means of the draw-stops. The pipes above each cross-slide, as previously noted, are of one quality, and are called a stop. Each department of the organ consists of a number of different stops, producing sounds that vary in quality.

The large and powerful pipes of the great organ are generally placed in front. Back of them are the smaller pipes of the choir-organ, less powerful and more suited to accompany voices. Above the latter is the swell-organ, the pipes of which are enclosed in a wooden box (swell-box), with a front of louver-boards like Venetian blinds, which may be made to open and shut by means of a pedal, and thus give crescendo and diminuendo effects. The pedal organ is sometimes placed behind the choir-organ, and sometimes half on each side. The compass of the manuals usually runs from great C (the C on the second line below the staff in the bass clef) to three-lined F (an octave above the upper line of the staff in the G clef). The pedal compass is usually from great C to one-lined F—about two octaves and a half. The keyboards regulate the compass of each stop, but do not limit the compass of the organ as a whole, as this depends only on the pitch of the pipes, which differs in different stops. For example, a stop, or set of pipes, giving notes of the pitch indicated by the keyboard, is said to give an 8-foot tone. This is because, sound traveling about 1100 feet a second, and great C having about 64 vibrations a second, and each vibration being twice the length of an open pipe, it takes an open pipe about eight feet long to sound great C. A pipe sixteen feet long sounds an octave lower, so that a 16-foot tone is one that sounds an octave lower than played, while an 8-foot tone sounds as played. Similarly, a 4-foot tone is an octave above the key, a $2\frac{2}{3}$-foot tone a twelfth above, and a 2-foot tone two octaves above. Large organs have all these, as well as one or more 32-foot stops, which sound two octaves below the key. Now even the 64-foot tone has been used, in the town organ at Sydney, Australia, the pipes giving a tone three octaves below the key. In its lowest octave, the 64-foot tone has so few vibrations that it is inaudible to the human ear. Other intervals besides these are used under the name of mixture. The mixture stop on a large organ consists of three or four ranks of small pipes, giving high, thin tones that are used to blend with the keynote and make it more brilliant. The term furniture is sometimes used, as well as mixture, furniture having more pipes.

Organ-pipes vary greatly in form and material, but are divided into two chief groups, flue-pipes and reed-pipes. Flue-pipes, having no reed mouthpiece, are further divided into stopped and open pipes. A section of an open pipe is shown in the figure. The letter *a* shows the foot of the pipe, *b* a flat plate called the language, and *c* the body of the pipe. The language does not extend wholly across the pipe, but stops just short of the opening *d-e*. When air is admitted through the foot of the pipe, it causes various flutterings at *d-e*, and those which have the proper rate of speed cause vibrations in the air-column of the pipe. The vibrations of a column of air consist of alternating

compressions and rarefactions, acting much like pushes and pulls given to a loosely coupled freight train. In an open pipe, the push, or puff, travels to the end and out, creating a slight pull, or suction, as it emerges. This suction travels back to the lower end of the pipe, where the flutterings start another puff. Meanwhile the first puff has been traveling onward, thus making the wave-length of the tone (i.e., the distance between successive puffs) twice the length of the body of the pipe. If the top of the pipe is closed with a plug, or tampion, each puff and suction has to travel up and down the tube before emerging into the air, thus making the wave-length four times the length of the pipe-body, and giving a tone an octave lower than that of an open pipe of the same size. As a tone of 16 vibrations a second is the lowest one audible to man, and sound travels a little over 1100 feet a second (say 1120), each wave-length of the tone would be 70 feet long, needing an open pipe with a 35-foot body. A longer body than this would give, not an audible tone, but a set of rhythmic puffs like whispers. As the number of vibrations is doubled to obtain the octave of a note, it follows that the wave-length and the length of the pipe must be halved. Intermediate lengths give the notes of the scale. Pipes are sometimes half-stopped, having a sort of chimney at the top. A reed-pipe derives its tone from the vibrations of a reed instead of air flutterings, though the reed itself is set in motion by air from the wind-chest. The reed is a small metal tube with its front cut away and a tongue or spring inserted, which will vibrate at the proper rate to produce the tone. If the tongue does not vibrate against the tube, the reed is called a free reed.

Organ-pipes differ in shape, proportion, or material, though the pipes in any one stop are much alike. Among the more important stops are the open and stopped diapason, so called because they run through the entire length of the manual; various kinds of instrumental or vocal stops, such as flute, posaune (trombone), English horn, basset horn, oboe, vox humana, viola, etc.; the mixture stops already mentioned, which reinforce a tone with faint, high overtones; and others, such as bourdon, dulciana, etc. It will be seen that registration, or the proper use and combination of stops in organ-playing, is a matter of paramount importance.

The largest organ on record was the one built for the St. Louis Exposition (1904). It had 140 stops, and 10,059 pipes. That of the Chicago Auditorium has 109 stops and 7124 pipes. The largest permanent organ on record at present is in the town hall at Sydney, Australia. This has 128 speaking stops (including carillon and thunder) and 8745 pipes. It has all the improvements of great modern organs—fourteen couplers, three balanced swell-pedals, three tremulants, thirty-three pneumatic combination studs, and six combination pedals. These studs and pedals are so arranged that each one throws in a special combination of stops. The couplers of an organ enable the player to sound one note in more than one department of the organ at the same time, or to sound the octave above or below with the note played. The Sydney organ has six divisions—great, swell, choir, solo, echo, and pedal. Among the larger pipes are a 32-foot contra-bourdon and several 16-foot bourdons and diapasons. The pedal organ includes four 32-foot stops, nine 16-foot stops, one $10\frac{2}{3}$-foot, and one $5\frac{1}{3}$-foot, besides 8- and 4-foot stops and the great wooden contra-trombone (reed) at 64 feet. The great organ has 28 stops, the swell 25, the choir 20, the solo 21, the echo 8, and the pedal 26.

The ultimate origin of such grand instruments is to be sought in an antiquity almost prehistoric. The wind, sounding in the hole of a broken reed, first suggested to man the music of pipes. Soon he fashioned a set of these pipes, and mythology ascribed them to Pan. The next step was the use of one blow-hole in a primitive wind-chest below the pipes. The Romans invented hydraulic organs, in which the air was compressed by water-power. During the Middle Ages one organ at least used "heated water," possibly being run by steam-pressure. The Greeks and Romans used bellows also, with boys standing on them to cause the pressure. A relief showing such an organ was placed on an obelisk erected by Theodosius in 393 A.D. Pipes were then made of copper or bronze. Air was admitted by the drawing out of a rod at the base of the pipe. Organs became fairly common in Spain before 450 A.D.

About 666 A.D. Pope Vitalianus introduced the organ into the Church service. Organs were made in England in the eighth century. King Pepin introduced the instrument into France, obtaining an organ from the Byzantine Emperor. A copy of this was brought into Germany by Charlemagne, and the Germans soon became expert makers. For some centuries only the "full-organ" effect was possible, so it is not surprising to read that a lady in Charlemagne's court went crazy on hearing an organ. About 822 Charlemagne received an organ of softer tone, sent by the Calif Harun-al-Rashid.

The English monk Wulstan, who died in 963, left this description of the cathedral organ at Winchester: "Twice six bellows above are ranged in a row, and fourteen lie below. These, by alternate blasts, supply an immense quantity of wind, and are worked by seventy strong men, labouring with their arms, covered with perspiration, each inciting his companion to drive the wind up with all his strength, that the full-bosomed box may speak with its four hundred pipes, which the hand of the organist governs. . . . Two brethren [assistants] of concordant spirit sit at the instrument, and each manages his own alphabet [i.e., draw-rods marked with letters]. There are, moreover, hidden holes in the forty tongues and each has ten [holes with pipes above] in their due order. Some are conducted hither, some thither, each preserving the proper point for its note [i.e., the pipes were "conveyanced off," probably forming an ornamental front]. They strike the seven differences of joyous sounds, adding the music of the lyric semitone [i.e., diatonic scale with flat seventh added]. Like thunder the iron tones batter the ear, so that it may receive no sound but that alone." The fourteen bellows below and twice six above suggest our arrangement of great organ below and choir and echo above. The alphabet is mentioned because the rods and keys were marked with the letters of the scale. Each rod, or slide, opened ten pipes.

A treatise of the eleventh century, by a monk named

Theophilus, states that the slide-box was made two and a half feet long and over a foot wide, and that the pipes were placed on its surface; that the compass consisted of seven or eight notes; that the playing-slides were of equal width, and not made small for narrow pipes; that the organ was played by these slides, which were held by little side-slits; that there were two or more pipes to each note, which received air through holes of 1½ inch diameter in the slide; and that the instrument was played by pushing the slides in. This was the common type of early medieval organ. It was possible to make a small portable organ, afterward called the regals; and we find Monteverde using one as late as the seventeenth century. Stationary organs were called positive, and that term is sometimes used for one of the departments and manuals of modern French organs. The use of keys dates back to the eleventh century, when they took the primitive form of large levers. A spring-box was adopted with these, to restore the keys to their original position after they were played. These early keys were so large that the performer played them with his two fists, and if his hands grew sore he was allowed to use his elbows. The fall of the keys was often as much as a foot. Their size gradually diminished, but was kept large, to fit the pipes, until the fourteenth century. That century saw the introduction of a crude roller-board, transmitting the key-motion sidewise so that the pipe no longer had to be placed directly behind the key. The additional semitones of our scale were introduced at this time.

In 1350 a monk at Thorn, in Poland, made an organ having twenty-two keys. Eleven years later Nicholas Faber finished the famous Halberstadt organ, of the same compass. The latter is described by Prätorius. It was marked by a successful effort to modify the continuous "full-organ" effect, for it had three keyboards, two of which operated on certain pipes, and made them sound alone. Later, a sliding board was used to prevent certain pipes from sounding all the time. From this idea came the separate stops, worked out mechanically by the German Timotheus, who constructed a soundboard for an organ at Würzburg. The spring soundboard of this period had individual valves instead of cross-slides; but all the valves of a given set of pipes could be opened by a single stop. As the stop was drawn out, metal pins pushed the valves open. The stop was held open by being hooked to an iron bar. The wind was admitted to the valve-box by another valve, below, operated directly by the key. At this time the different stops were given names, mixture (sesquialtera) being included. All the pipes were open, cylindrical, and made of metal, but stopped pipes of wood soon came into use—gedackt, bourdon, kleingedackt, and other mellower registers. Tapering pipes (narrow on top) also were adopted, for gemshorn, etc., and spreading pipes, as in the dolcan; also reeds. By 1500 the keys had been so decreased in size that the octave had almost reached its present dimensions. Pedals were used at first merely to sustain the manual tone, but in 1418, or perhaps even earlier, they were provided with independent bass pipes. Traxdorff, of Mainz, and Bernhard, of Venice, are sometimes mentioned as inventors of the pedal, but they flourished fifty years later. Near the beginning of the sixteenth century the use of slides instead of springs was introduced. The pallets and springs in the wind-chest were kept, but that meant only one valve for each key, instead of one for each pipe. The stops could now be drawn out without undue effort.

A large organ was erected at Lübeck, between 1516 and 1518, which had two manuals and a set of pedals. It had 57 stops, some enclosed in a swell-box. There was a 32-foot principal for the pedals. This is the organ that Buxtehude used when Bach walked fifty miles to hear him. Two years before this (1703) Handel and Mattheson had come to try for the post of organist, which its incumbent wished to resign. But Buxtehude had made it a condition that his successor should marry his daughter, and the two young aspirants decided not to compete. The account does not specify whether they had seen the lady in question.

After the sixteenth century large organs became common. This was especially true in England, where the organ-builders have always shown great mechanical skill. During the Protectorate the Puritans opposed organs and scattered the makers. In the United States the Puritans of Boston, as late as 1713, refused the gift of an organ from Thomas Brattle. The instrument went to King's Chapel, and later to Newburyport and Portsmouth, N. H. It is still in existence in the latter city, and capable of use. Organs were made in America as early as 1745, when Edward Bromfield, Jr., copied an English model. After the Restoration in England, Bernhard Schmidt and Renatus Harris revived the industry of organ-building. From that time on there have been many improvements—in tracker and sticker mechanism, between the key and the wind-chest; in the invention of couplers; in the use of improved bellows, fans, and other devices for air-supply; in the applications of pneumatic and electric power, the latter offering many possibilities; in the adoption of combination studs and pedals; and in many other points depending on the progress of modern manufacturing. For the last five centuries or more, in fact since the use of two manuals at Halberstadt in 1361, the organ has deserved its title, "the king of instruments"; and the great modern organs are more than ever regal in their noble grandeur and infinite variety.

References:—The best work to present all the most modern applications of electricity to the organ, and all the recent devices of couplers, combinations, etc., is "The Art of Organ-building," by George Ashdown Audsley, a large treatise in two volumes. For the fundamental points of organ structure (minus the most modern improvements) Hopkins and Rimbault's "The Organ, its History and Construction," also a large work, may be commended. Other works are: Dickson, "Practical Organ-building"; Elliston, "Organs and Tuning"; Hinton, "Facts About Organs"; Locher, "An Explanation of Organ Stops"; Rimbault, "The Early English Organ-builders and Their Works"; Robertson, "A Practical Treatise on Organ-building," a large and important work in two volumes, and embracing modern details.

From these and similar works that have been published the student of this noble instrument will be able to inform himself fully regarding its history, which will yield him pleasure as well as instruction.

III. INSTRUMENTS OF THE LUTE CLASS

AS the parent of instruments whose strings are plucked or struck with the fingers, the lute, though now obsolete, holds an important place in musical history. Three centuries ago it was almost as popular in Europe as is the pianoforte everywhere to-day.

The lute is represented in Egyptian sculptures, and Egypt, therefore, must have been one of its early homes. It anciently became a favorite instrument of the Arabians, and its introduction into Europe followed the Saracen conquests in Spain. The Arabian lute was made of twenty-one pieces of maple-wood, with a flat face, a round back, and three rosettes in the face. The strings were eight in number and were tuned in pairs.

The European lute also had originally eight strings, and the number was not increased for many centuries. At first the strings, of thin catgut, were arranged in four pairs, each pair being tuned in unison, so that its open strings produced four tones. Until the sixteenth century twelve (six pairs) was the largest number of strings. Eleven appears for some centuries to have been the most usual number. These produced six tones, since they were arranged in five pairs and a single string. The latter, called the chanterelle, was the highest.

According to Thomas Mace, the English lute in common use during the seventeenth century had twenty-four strings, arranged in twelve pairs, of which six pairs ran over the fingerboard and the other six by the side of it.

The neck of the lute had frets consisting of catgut strings tightly fastened round it at the proper distances required for insuring a chromatic succession of intervals. The order of tones adopted for the open strings varied in different centuries and countries; and this was also the case with the notation of lute music, which was called tablature. The most common practice was to write the music on six lines, the upper line representing the first string; the second line, the second string, etc.; and to mark with letters on the lines the frets at which the fingers ought to be placed—*a* indicating the open string, *b* the first fret, *c* the second fret, etc. Sometimes figures were used instead of letters.

The lute was made of various sizes, according to the purpose for which it was intended in performance. The chitarrone, or bass lute, was the largest form of the instrument, and was used in Italian orchestras. Some specimens still preserved are more than six feet in height. Often lutes were elaborately wrought and beautifully decorated. They were equally in favor in private hands and in early orchestral combinations. Beginning with the eighteenth century, the lute was gradually superseded in general use by the clavichord and in the orchestra by the violin. Its existing relatives are the mandolin, the guitar, and the banjo, each of which we will briefly describe.

THE MANDOLIN

This instrument has a fretted fingerboard and from four to six single or double metallic strings. These are stretched over an almond-shaped body. The mandolin is tuned like the violin, and is played with a plectrum. The body of the instrument is formed of a number of narrow pieces of different kinds of wood, bent into the shape and glued together. On the open portion of the body is fixed the soundboard, with a fingerboard and neck like a guitar.

Formerly in Italy there were various kinds of mandolins, of which the most common were the Neapolitan and the Milanese. The Neapolitan had eight strings, constituting four pairs. They were tuned (beginning with the lowest) G, D, A, E. The Milanese had usually ten strings, constituting five pairs. They were tuned G, C, A, D, E. In Spain the mandolin has six double strings. The Turks have a mandolin with seven double strings.

Of the surviving forms of this instrument, the Neapolitan is most in use to-day. Its range is about three octaves upward from the G next below middle C. While the strings are struck by a plectrum held in the right hand, the fingers of the left hand regulate the notes as on a violin. Although rather tinkling, the tone is penetrating, agreeable, and sympathetic. Among instruments of the pizzicato class the mandolin is well suited to the production of melody. By rapid repetition of the note a good sostenuto is obtained, the repeated notes, if performed with sufficient speed and equality, conveying the effect of a sustained sound. While it has never become an orchestral instrument, the mandolin has been employed sometimes by operatic composers for procuring characteristic effects. Mozart used it to good purpose in "Don Giovanni," and Beethoven wrote a sonatina for it. Handel also employed it in his oratorio "Alexander Balus," as likewise did Paisiello in his "Barber of Seville."

THE GUITAR

The guitar now in general use is the Spanish. It belongs to the family of lutes and zithers, of which it is now the most important representative. The name is inherited from the Greek κιθαρα, though the instrument is not the same. The guitar is really of Arabian origin, and was introduced into Spain by the Moors. It spread into Italy and France in the sixteenth century, in a five-stringed form. The six-stringed form, now in use, was invented by a German named Cetto, about 1790. The real Spanish guitar was introduced into England after the Peninsular War by Ferdinand Sor, a Spaniard, who composed for it. The guitar soon became so popular in England that it seemed about to displace the Érard harp; but Érard distributed guitars among the working classes, so that the aristocracy would consider the instrument too plebeian, and keep to the harp.

The guitar has a flat front and back. There is a large sound-hole in front. The sides are curved almost like those of a violin, and some have thought from this that the guitar was originally played with a bow. But the shape varied a good deal. The soundboard, or front, is usually pine, while maple, ash, or cherry serves for the other parts of the sound-box. The neck and fingerboard are made of hard wood, and the bridge, at the other end of the strings, is generally ebony and metal. The three upper strings are

catgut, the other three being made of silk wound with fine wire. They are tuned in fourths and thirds, giving the written notes E, A, D, G, B, and E in ascending order, beginning with the E below middle C; but sounding an octave lower than written. The Spanish instrument had ebony pegs for tuning, but metal screws are now used. The fingerboard is provided with frets to mark the intervals. The instrument can be transposed a semitone downward by means of a nut called the capo tasto. It is thus made ready for use in flat keys. The old instruments often had extra strings, duplicating the pitch of the others. The guitar is never played with a plectrum, but always by the fingers. The little finger rests on the soundboard during performance, in a spot so chosen that the thumb can sound the deepest strings.

On the famous "Gate of Glory," made by Mateo in 1188 for the church of St. Jago of Compostella (Spain) is a relief of an early guitar, or vihuela. A hundred years later, in the time of the troubadours, there were several kinds of vihuela, some played with bow or plectrum. In modern times there has been a Terz-guitarre, a minor third higher than usual. Giuliani wrote a concerto for this, with band, which was published by Diabelli and transcribed for the piano by Hummel. The popular Portuguese machête, or octave guitar, has four strings, tuned to the D, G, B, and D running up from middle C, or sometimes D, G, B, and E. In Madeira, after the work in the vineyards is finished, the workers enliven their homeward journey with this instrument.

The chief composers for the guitar, besides Sor and Giuliani, have been Legnani, Kreutzer, Nüske, Regondi, and Leonard Schulz. Hiller's impromptu "Zur Guitarre" imitates the style of that instrument on the piano. The guitar was the only instrument that Berlioz could play. Paganini was very fond of it, and at one time gave up the violin in its favor. Recently some quartets of his have been discovered, for violin, viola, cello, and guitar. The guitar is well adapted to accompany the voice, and composers have used it for this purpose in opera. In Rossini's "Barber of Seville" it was employed in Almaviva's serenade. But it is too light for orchestral purposes. Schumann thought of using it for the accompaniment of the Romanza in his D minor symphony, but gave up the idea and used the pizzicato tones of violins instead. These tones give an excellent guitar effect in the Barcarolle of Offenbach's "Contes d'Hoffmann" and in the song in the prelude to Mascagni's "Cavalleria Rusticana." The guitar is eminently pleasing as a solo instrument, and the dreamy melancholy of its tone-color gives it a real charm. Notwithstanding the various modifications that have been made in it, the instrument remains but slightly changed.

THE BANJO

The word banjo is probably a corruption of bandore, or pandore, an instrument attributed to the god Pan. The banjo is a stringed instrument with a flattish circular body and a long neck. The body is like a very flat drum with only one covering, a thin sheet of parchment stretched tightly over a hoop to give the desired resonance. The banjo is played by the fingers, its strings being plucked. It has no frets to guide the performer. Banjos usually have five strings, though large ones exist with six, seven, or even nine, the deeper strings being covered with wire. The chanterelle, or melody-string, is called the thumb-string, because it is not set in the order of the other strings, but set below the bass. In performance the neck is held in the left hand and the body rests on the player's knees, bringing the chanterelle on the inside, and consequently under the right thumb. The peg for this string is placed about halfway up the neck. The other strings are usually twenty-four inches long, the chanterelle sixteen. The ordinary five-stringed banjo is tuned to A, E, G sharp, B, and E, running up as written from the A just below middle C (small A). The thumb-string is the highest. The lowest string is sometimes tuned to G, a tone lower. The six-stringed instrument is tuned up as written from the same G, its tones being G, D, G, B, D, and G in ascending order. The seven-stringed instrument adds middle C to this series. The nine-stringed banjo has two extra chanterelles, giving the semitones above and below the highest G mentioned.

Like the guitar, the banjo sounds an octave lower than the written notes would indicate. Sometimes, in playing, the first finger of the left hand is placed across all the strings, thus transposing the instrument, and serving the purpose of a nut, or capo tasto. This is called the barre.

Crude instruments of the banjo type exist among many savage tribes. (See Wallaschek, "Primitive Music.") Almost any string stretched over a long frame would lead to some banjo-like instruments. In Senegambia the negroes make and use an instrument called the bania, which Engel ("Musical Instruments") suggests as a possible origin of the American banjo. This and other instruments may have come from a more civilized country like Arabia, through the medium of traders; but there are so many crude banjos among the Africans that a native origin is certain also. The banjo is too twangy in effect for orchestral use. It does not sustain the tones long, hence lively and rapid music is especially suited to it. Gottschalk's "Banjo" gives an excellent illustration of the style transferred to the piano. The banjo repertoire is wholly light and popular in character.

DRAWING-ROOM MUSIC AND ITS FORMS

DRAWING-ROOM MUSIC AND ITS FORMS

By Louis C. Elson

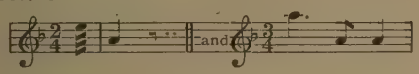
THE term "drawing-room music," or in German "Salonmusik," is usually applied to such instrumental music as charms by melody, harmony, rhythm, and brilliancy. Classical music may have all these charms but usually adds an appeal to the intellect by development of figures, by counterpoint, or by other more subtle devices. Drawing-room music appeals chiefly to the emotions; classical music appeals both to the emotions and the mentality of the auditor. Beethoven was the composer who made these two appeals with the most perfect equipoise. Bach leaned more to the intellectual side, and Chopin, even in the classical forms, was always chiefly emotional.

The forms in which drawing-room music is chiefly written are generally easy of recognition and can be mastered readily, even without a teacher. It is the purpose of this article to enable our readers to study these simple forms by reference to some of the musical works embraced within its pages.

Instrumental music, in its simpler forms, is very closely related to poetry. It has similar rhyming effects and it divides very much as a poem might be divided. The figure in music is comparable to the poetic foot. The phrase is like the line in poetry. The period is like the stanza.

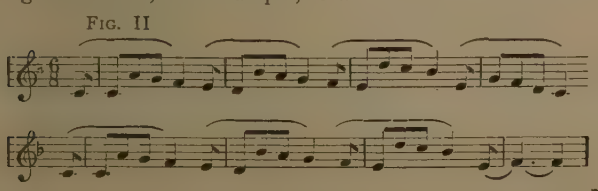
The figure, then, is the shortest recognizable musical thought. To be recognized it must have rhythm. Rhythm involves contrast, therefore a single note is not a figure, any more than a single syllable can be a poetic foot. "Father," "farewell," "dignity," "removal," all represent different poetic feet, the first giving a heavy and a light accent, the second a light and a heavy one, the third one heavy and two light accents. In exactly the same manner the first figure of the first movement of Beethoven's Ninth symphony pulsates like the word "farewell" (an iambic foot), and the chief figure of the second movement in the same work pulsates like the word "dignity," a dactyl.

Fig. I

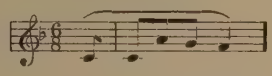


But the figure is sometimes used in music in a manner which finds no parallel in poetry. Sometimes, for example, it may be used as a seed from which many musical thoughts may be grown. It is often longer than two or three notes, and we may sometimes make an entire melody by repetitions and changes of a single figure. Here, for example, is a musical theme:

Fig. II



It is easily recognized as a complete musical sentence, but when it is examined it is found that the entire sentence, or period, is made from its first five notes, the following figure:

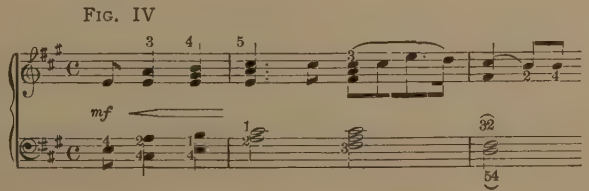
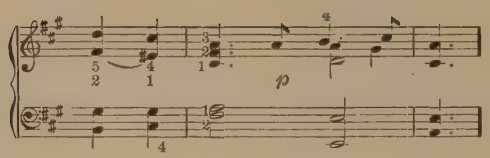
Fig. III

This figure is first announced, then transposed, then expanded, then varied (although still recognizable by its rhythm), and then the process is repeated.

Not all melodies are thus formed from single figures, but they often may be.

The phrase in music is like the line in poetry. It is a division, but a dependent one. It requires another, similar division to attain completion. The period in music we have compared to the stanza in poetry. It is, as above intimated, a complete sentence. In some simple folk-songs it may be the entire composition; but just as we find very few poems of one stanza, so in instrumental music we demand more than a single period for a satisfactory musical work. A single period would lack contrast, and contrast and symmetry are the two chief laws of the forms of drawing-room music.

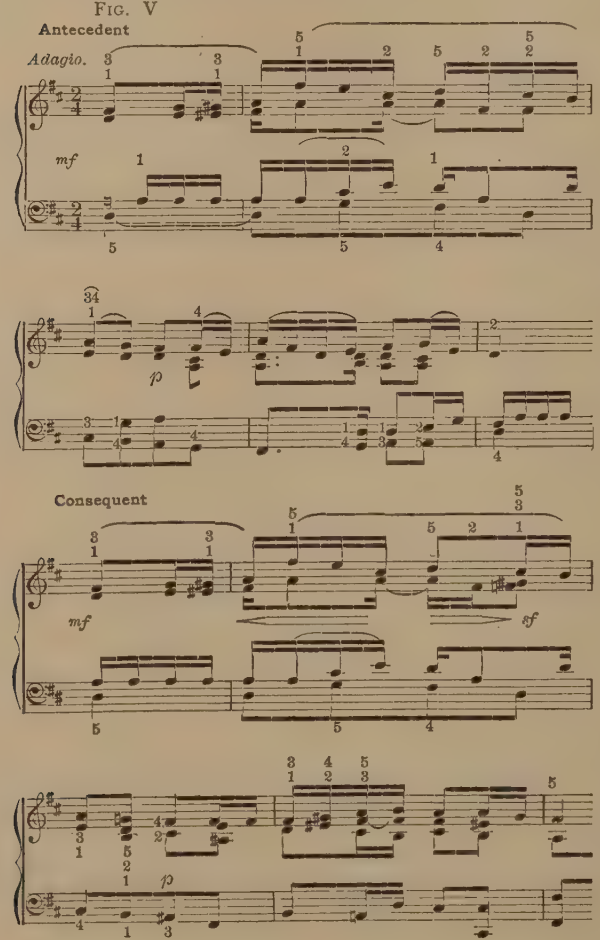
Most periods are made up of two phrases which may be said to rhyme together, like a couplet in poetry. The relationship of these two phrases to each other is the most important thing for the reader to master. The first phrase is called the *antecedent,* and is in the nature of a proposition or question. The second phrase is called the *consequent,* and is in the nature of a fulfilment or answer. The close relationship and balance of these two phrases in simple music is a point that must be constantly kept in mind.

Usually the antecedent is exactly four or eight measures long, although in some waltzes it may be sixteen measures long. The antecedent usually ends on the second or fifth note of the scale, although there are cases where it closes with the first or third note. It usually suggests a pause, although not an ending, but sometimes it may come to a complete end (a full cadence) on the first note (tonic) of the scale. But even when this is the case it does not suggest a close, to the musical mind. We unconsciously demand something to balance against it. Here, for example, is an antecedent with a full cadence:

Fig. IV

Play this phrase over once and the ear will sense incompleteness. Play it through twice and it will become a satisfactory musical sentence or period. From this it will be seen that sometimes the consequent can be a mere repetition of the antecedent. Before we consider the consequent, however, we must state that the antecedent is usually treated quite strictly in most music, being generally of fixed length and keeping this length at each return.

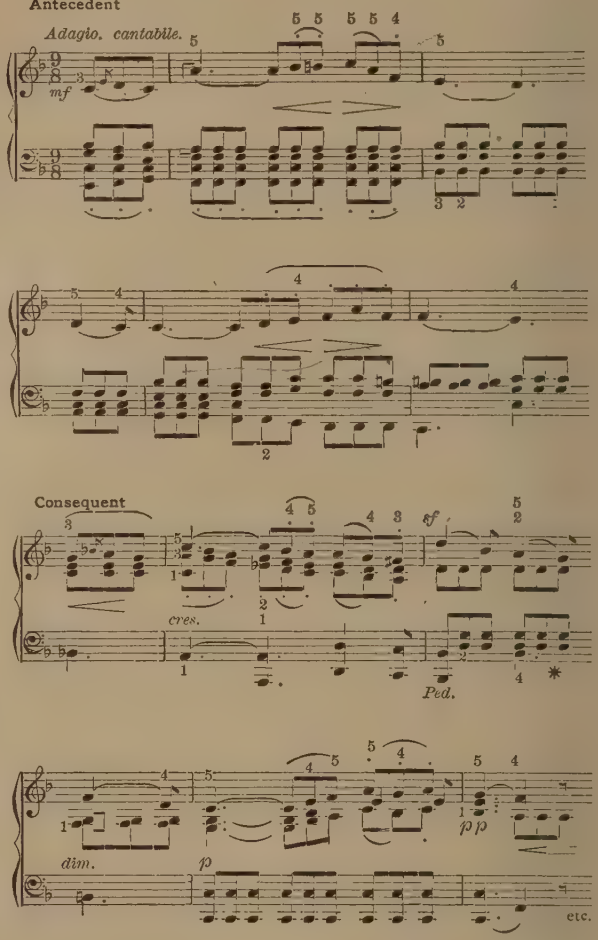
The consequent may be regarded as the answer to the antecedent and its completion. Sometimes it may be a mere repetition, as indicated in Fig. IV, above. More generally, in simple forms, it is a derivation from the antecedent, beginning like it but leading to a different conclusion. The consequent may end with a full cadence in the tonic key or in any other key, but it should give the impression of a complete ending, terminating the musical sentence or period. The following example may demonstrate this:

FIG. V



Sometimes the consequent may not be a definite answer as above, but may carry on a new melodic thought, as below:

FIG. VI



In simple forms the consequent will be treated almost as strictly as the antecedent. It will be of the same length, or will closely resemble the antecedent. But in more advanced music the consequent may be treated more freely than the antecedent. Thus, if the melody is repeated (being written out in full notation), the antecedent will almost always be exactly the same as in the first presentation, or very nearly so, while the consequent may be altered and varied, and sometimes even an entirely new consequent may be attached to the original antecedent.

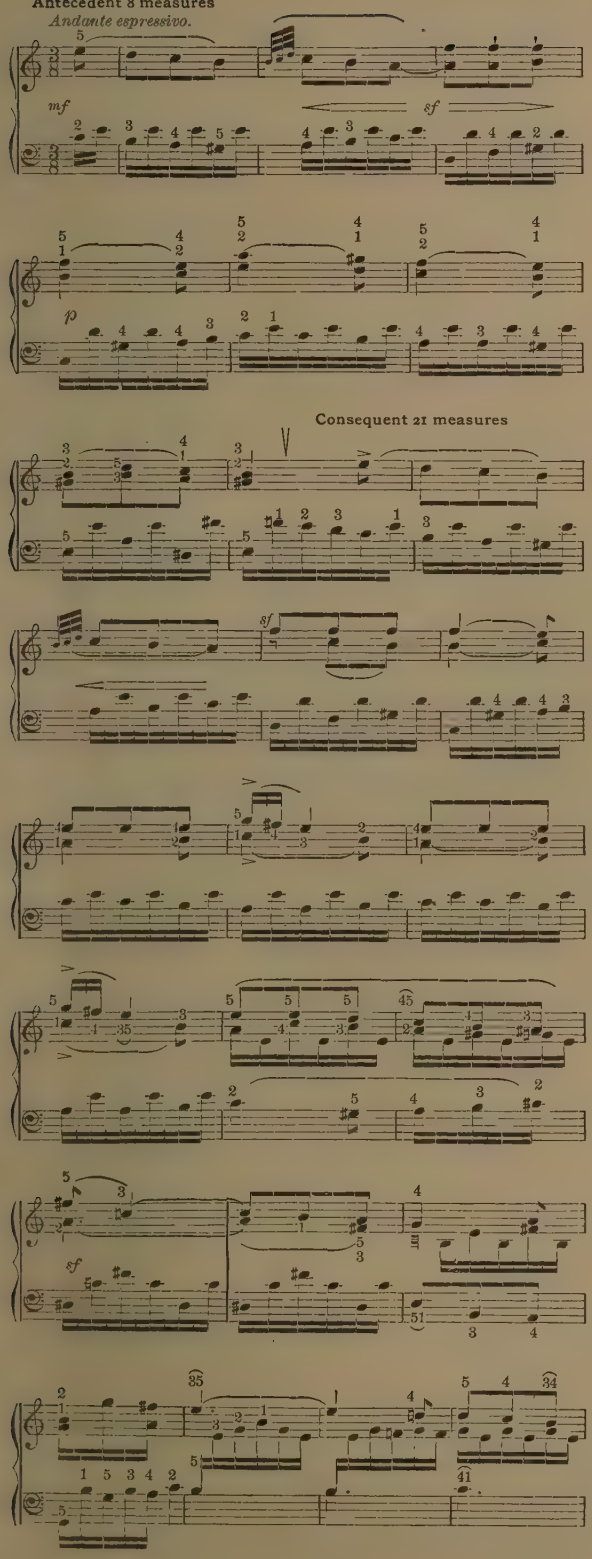
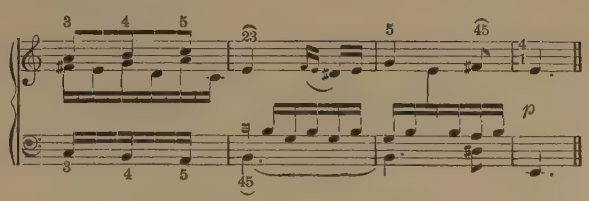
Frequently, also, the consequent may be made longer than the antecedent, by interpolations or extensions. It ought never to be shorter than the antecedent, although Mendelssohn, in his "Spring Song," does venture to give a consequent one measure shorter than the antecedent—with rather poor effect. (See "The World's Best Music," First Series, Vol. II, p. 486.)

We add here an example of a consequent made longer than the antecedent:

FIG. VII

Antecedent 8 measures

Andante espressivo.



Of course, if the entire composition consists of but one period, the consequent must end in the tonic key. Such folk-songs as "The Maid of Islington," "Sir Patrick Spens," "The Broken Ring," etc., are illustrations of this. But if the composition is extended beyond the period, as is the case with Figs. V, VI, and VII, the consequent may or may not end in the tonic key.

Having thus established the smallest complete musical form in the mind of the reader, we can proceed to a more contrasted and larger form. The form next larger to the single period is the two-period song-form. The term "song-form" is applied to these small forms, since they came originally from vocal compositions. Some of the forms now to be described had their origin in folk-melodies of even the thirteenth and fourteenth centuries.

The two-period song-form is of two kinds, the simplest being made of two periods in contrast with each other. Each period in this form is made according to the formula given above. The first period may end in the tonic key or in any other. It may be repeated or not. The second period must end in the tonic key. It may also be repeated if the composer so desires. The two periods are contrasted with each other. Usually they are of equal length, but they need not be so. As an example of this form let the reader examine the first verse of Schubert's "My Peace Thou Art," in the vocal volume of "The World's Best Music," New Series, p. 103, and he will find, beginning with the vocal part, four measures of antecedent, and four measures of consequent by literal repetition. This is the first period. Then four measures of antecedent (of the second period) followed by six measures of consequent, the two last measures being an extension of the musical thought.

Franz's "Out of my Soul's great Sorrow" (vocal volume, New Series, p. 12) is another example, and here the whole composition may be studied. The first period has four measures of antecedent and four of consequent, ending in the key of A major. The second period is in contrast with the first, but is of exactly the same length, four measures of antecedent and four of consequent, after which a couple of measures of instrumental postlude (not necessary to the form) are added.

The same composer presents for us an example of the still smaller form of a single period, but with the very unusual form of an antecedent of six measures. His "Dedication" (ib. p. 139) gives a period of six measures antecedent and seven measures consequent, with an instrumental extension. Then the single period is repeated, with the same antecedent, but with the consequent varied and extended to twelve measures.

Another single-period form can be found in Leopold Damrosch's "Jessie" (ib. p. 304), which the reader will readily analyze for himself.

We pass now to another form of two periods, but one which is more symmetrical than the form described above. In the preceding forms the two periods were contrasted with each other, and the form may be called the "two-period independent" form. But there is a simple law in musical form which is that the last thought of the composition shall resemble the first. "End as you began!" is one of the oldest precepts of symmetrical form. This can be carried out in a form of two periods as follows:

First period. Antecedent and consequent as above described.

Second period. A new antecedent, generally out of the key of the work and dramatic in character, followed by a consequent which does not reply to this new antecedent but to the antecedent of the *first* period. In other words, the consequent of the second period is derived from the antecedent of the first period, thus ending as we began, or nearly so.

In this form the first period may end in the key of the tonic or in any other related key, the second period, of course, ending in the tonic. Either period may be repeated.

In this form the phrases are usually all of equal length, so that if the first phrase is four measures long the composition will be 16 measures in length, if the first phrase is eight measures long the work will be 32 measures long. This rule is rarely broken in this form, which may be called the "two-period song-form, with partial return."

As an example of this form in its greatest simplicity we may name here a short folk-song which has become famous the world over. It has been ascribed to Mozart, but as Burney, in Mozart's lifetime, sought for its composer in vain, it certainly is not by him. It clearly shows with what simplicity the composer can sometimes achieve great results. It is "Drink to me only with thine Eyes" and may be found in "The World's Best Music," First Series, p. 721.

In examining this song the reader will find the following form:

First period. Antecedent, four measures; consequent, literal repetition, four measures.

Second period. New antecedent, four measures; consequent—a literal repeat of the opening antecedent —four measures.

No simpler example of the two-period form with partial return could have been written. Yet, for all its simplicity—perhaps because of it—this song is imperishable.

In "The World's Best Music" will be found such folk-songs as "Old Folks at Home," "Comin' thro' the Rye," and others, which well illustrate this species of two-period form in which the last phrase is an answer to the first.

The next larger form is one which is more often found in short instrumental works than any other shape. It is the "three-division song-form." This is also built upon the principle of ending as we began, and the shape is more clearly defined than in any two-period form. It is made as follows:

The first division is a period as outlined above. The first period, or "theme," may end in the tonic or in any other key, and may be repeated or not, as the composer may desire.

The second division may be either an "episode" or a "countertheme." The episode affords a little the better contrast, since it is not only in a different key from the theme, but also in a different style, being much freer than a melodic period. The episode is usually modulatory and dramatic, rather than tuneful. It may be of any length. It usually avoids the key of the tonic until its close. It seldom ends with a cadence, but often leads directly into the next division.

If the second division is a countertheme it should easily be recognized, for a countertheme is a definite period, having an antecedent, a consequent replying to it, and a full cadence. The countertheme is usually not in the key of the tonic, but may b in any other key. If the theme is gentle, the countertheme should be bold, and *vice versa,* in order to gain all possible contrast. The countertheme is often of the same length as the theme, but it need not be so.

The third division of this form is a return of the theme of the first division. But here many deviations may take place. Sometimes, in a very simple form, the first division may return intact, with its antecedent and consequent exactly the same as before. More often, however, some changes take place. The antecedent *always* returns exact, or nearly so. It will always be of the same length as in the first division, although some slight variation may at times be indulged in, but the antecedent, in its return, will always be clearly recognizable.

The consequent may, if the composer wishes, be freely altered. It may change its modulation, it may be of a different length from the consequent of the first division, and sometimes even an entirely new consequent may follow the strict return of the antecedent.

Sometimes, also, but more rarely, one will find the third division to consist of a *single phrase only.* This form would be called "three-division song-form, with abbreviated return."

The reader can now take Hölzel's "Song without Words" (Vol. II, New Series, p. 401) as an example. The first four measures are the antecedent, the next four are the consequent; but the cadence is evaded the first time. Then the theme is repeated, four measures antecedent and five measures consequent. This brings the first division to a close, in the tonic key.

Division two is a clear countertheme in the key of A flat major. There are four measures of antecedent, and four of consequent, ending with a full cadence.

Now follows the third division. The antecedent of the first division comes back exactly as at first. The consequent also comes back in a clearly recognizable state, beginning as it did before, but now it is extended for a few measures before reaching its cadence. The form of this is very clear.

Let the reader turn to Vol. I, New Series, p. 202, and see Mendelssohn's "Song without Words," entitled (although the name does not come from the composer) "Consolation." Here we find some new features. Any instrumental form may have an introduction, and may be followed by a coda. Both of these are absolutely free in form. Of the coda we shall say more later on. But in Mendelssohn's "Songs without Words" we sometimes find an innovation made to carry out still further the vocal idea.

It must be borne in mind that these pieces are songs

turned into an instrumental guise; indeed, one German critic has called them "folk-songs in evening dress." When, therefore, in such a work we find a free (non-melodic) division preceding the first melody, and the same free division following its end, it is better to use the terms "prelude" and "postlude" as we would in a real song. In this work, therefore, the first three measures and the last three measures are not to be regarded as belonging to the form itself.

Now beginning with the melody itself, count four measures and the antecedent will be found. In this case it ends with a full cadence, but nevertheless it would be incomplete by itself. The next four measures give us the consequent, clearly answering the antecedent, and cadencing in the key of the tonic—E major.

Now follows an episode. It is dramatic, modulatory, strongly in contrast with the theme, and is six measures long. It has no cadence, but leads directly into the next division. It is this episode that saves the composition from being too sugary and sentimental.

The third division begins with the antecedent, which comes back, four measures long, and exactly like the antecedent of the first division. This is followed by a new consequent, four measures long, quite different from the consequent in the first division. It has sometimes been taken for a coda, but the analysis of Div. I, Theme, eight measures; Div. II, Episode, six measures; Div. III, Return of Theme, eight measures, is a clearer and more symmetrical explanation of the piece. The cadence extends into the first measure of the postlude, the parts thus overlapping each other.

As simple a form as any in our collection will be found in Vol. II, New Series, p. 516—Claribel's melody of "Come back to Erin." Here we find: Div. I, Theme, antecedent four measures, consequent four measures; Div. II, Countertheme, eight measures in the same manner (a cadenza here); Div. III (p. 518), return of theme as in Div. I.

Elgar's "Salut d'Amour" (Vol. II, New Series, p. 494) shows greater freedom in treating this form. Here the antecedent of the theme is eight measures long and the consequent of the same length. The full cadence is evaded and the theme repeated. At the end of the repetition the cadence is overlapped with a transition passage leading into Div. II. This division is an episode twenty-two measures long and begins as if it were to be a countertheme, with a clear antecedent of eight measures and what seems to be a consequent. But this consequent does not lead to any definite end. After six measures it begins to modulate freely back to the return of the theme, thus giving the character of an episode to the whole of Div. II. In Div. III the theme returns. The antecedent is (the rule has already been explained) the same as the antecedent of Div. I, and the consequent too begins as in that division, but it is soon changed and led into very charming modulations by which it is extended to a length of twenty-one measures. Then follows a coda which brings back reminiscences of the theme.

Many other instances of the application of this form can readily be found by the student. The uninformed critic might accuse the employment of such a simple form as tending to monotony, but this is by no means the case. It would be quite as just to accuse the human face of monotony because the eyes are always placed higher than the nose and the mouth always under it. Exactly as the human countenance differs in its features and their proportion, the three-division song-form may differ in dozens of little peculiarities.

Mendelssohn's volume of "Songs without Words" may be taken as a vivid illustration of this. Among a large number of short compositions in the above form, one can find such deviations as the following:

No. 1, an extended consequent; No. 2, a remarkable episode; No. 3, a return of theme in the bass part; No. 4, an abbreviated return, of one phrase only; No. 7, curious overlapping of the theme with transitions and returning passages; No. 14, a transposed repetition of Divs. II and III; No. 20, a fine exhibition of figure development; No. 27 (see Vol. I, First Series, p. 121), the theme repeated three times with constantly richer harmony; and many other changes might be spoken of. Mendelssohn's thoughts may not have had the grandeur of those of Beethoven, but in the management of the smaller forms he was as fine a workman as the world has ever seen.

To the above explanations we must add the fact that where repeats are used in these forms it is customary to repeat Div. I by itself, but Divs. II and III together. Sometimes, however, when Div. II is a countertheme it may be repeated separately.

Sometimes the parts are linked together more gracefully by passages which are extraneous to the actual form. If a passage leads from the end of a theme back to its beginning, to make a repeat, or from a countertheme to the return of the theme, it may be called a "returning passage." If it leads from the end of the theme to countertheme or episode it can be called a "transition."

The coda must be regarded as a musical postscript. After any musical form has been completed a coda may be added. The word comes from the Latin *cauda*, a tail, and therefore the coda is always in the nature of an appendix. But it sometimes becomes something more than this. It can be made into a species of summing-up. Very often it becomes the climax of the composition. Beethoven's codas often present noble figure treatment and become the most important parts of his works. The coda may be of any length and shape, although of course it must be in proportion with the composition which it ends.

We now pass to a larger form which, as the song-forms above described are too short for the majority of musical works, is the most used form of drawing-room music. It is called "song-form with trio," or "minuet-form," or "minuet with trio," or "applied song-form." The first title seems to us the most intelligible, and therefore preferable.

This form is made from two separate, independent, and complete song-forms, which are now united, or placed in contrast to each other, in a single composition. It is still, therefore, an application of the idea of ending as we began, but used on a larger scale.

If the song-form itself is well understood, the song-form with trio cannot present any difficulties. It has three large parts.

Part I is a full song-form in the tonic key. It may be in the two-period form or the full form of three divisions.

Part II is another complete song-form, contrasted

with the first both in style and in key. It is called the "trio," from the fact that in old orchestral works this second song-form was generally played by the wood-wind—flutes, oboes, and bassoons—in three-part harmony. Some of the Bach gavottes show this three-part writing clearly. The trio is most frequently in the key of the subdominant, but may be in other keys, and Beethoven has even sometimes written a trio in the key of the tonic. The trio may be of any form from a single-period to a three-division song-form. It is generally of a gentler and more melodic character than Part I, and is usually clearly separated from that part. In a few instances, however, one may find a transition leading from Part I to the trio, or from the trio into Part III.

Part III is a return of Part I, generally unaltered. This part is sometimes written out in notation and sometimes merely indicated by a "D. C." mark.

Le Duc's "Ray of Sunshine" (Vol. I, New Series, p. 248) will be found to be a most strict application of the above form. Its analysis is as follows:

Part I. First song-form, in A flat. Three-division form.
- Introduction, four measures.
- Div. I. Theme, eight measures. Repeated.
- Div. II. Countertheme, eight measures. Repeated.
- Div. III. Return of theme, eight measures.

Part II. Trio (subdominant key). Three-division song-form.
- Div. I. Theme, eight measures. Repeated. (Key of D flat.)
- Div. II. Countertheme, eight measures. Repeated.
- Div. III. Return of theme, eight measures. Repeated.

Part III. Return of first song-form.
- Div. I. Theme, eight measures.
- Div. II. Countertheme, eight measures.
- Div. III. Theme, eight measures.

There is no coda. The trio is not marked as such, as it sometimes is. Every antecedent and consequent in the work is exactly four measures in length. In spite of the simplicity of this treatment, this is a type of hundreds of drawing-room pieces some of them of high degree, as we may see by examining Chopin's Polonaise in A, Vol. I, New Series, p. 24. Here we find the following shape:

Part I. Three-division song-form. A major.
- Div. I. Theme, eight measures.
- Div. II. Countertheme, with short returning passage, eight measures.
- Div. III. Return of theme, eight measures.

Part II. Trio (subdominant key, D major). Three-division song-form.
- Div. I. Theme, sixteen measures.
- Div. II. Episode, eight measures.
- Div. III. Return of theme, sixteen measures.

Part III. Return of Part I, exactly as at first. Indicated by "D. C."

The repeats in this edition are indicated by dots. Sometimes, especially in old-fashioned music, the trio has a drone bass, like a bagpipe. Such a trio is called a "musette." Bach used the musette in his gavottes frequently. Examples of the musette may be found in D'Albert's Gavotte, Vol. II, New Series, p. 452, and in the Gavotte by Silas, Vol. I, p. 43.

Another form of song-form with trio is made by causing Part III to present a return of the first theme only of Part I, the shape now being:

Part I. A song-form.
Part II. The trio.
Part III. Return of theme of Part I.

When this form is used, the trio should be more than one period in length. Sometimes composers make the error of giving a trio of one period (even marking it "Trio") and then a return of one theme only. This is not properly a song-form with trio, but becomes a five-division song-form, or second rondo, of which we shall speak further on. The song-form with trio and abbreviated return, as the form above described is called, may be studied in Eilenberg's "First Heart Throbs," Vol. II, New Series, p. 524. The analysis of that piece is as follows:

Part I. Introduction, four measures.
- Div. I. Theme, sixteen measures.
- Div. II. Countertheme, sixteen measures.
- Div. III. Return of theme, sixteen measures.

Part II. Trio. (In D major, subdominant key.)
- Div. I. Theme, sixteen measures.
- Div. II. Countertheme, eight measures.
- Div. III. Return of theme, sixteen measures.
- Returning passage (like introduction), four measures.

Part III. Return of the first theme only, sixteen measures.
Coda, four measures.

In all of the above forms the antecedent and consequent exactly balance each other. In the sixteen-measured themes they are eight measures each; in the eight-measured themes they are four measures each.

The reader will find a slightly different shape of the same musical form in Herzog's "Black Key Polka Mazurka," Vol. I, New Series, p. 104. In this work he will find a song-form of three divisions, a trio of the two-period independent form (described in a preceding paragraph), and then a return of the first theme of Part I.

Numerous examples of the song-form with trio will be found in these volumes, both the full form and that with abbreviated return. No form is so copiously used. From the simplest works that are used in the early stages of music, to the advanced pieces of Liszt, Rubinstein, or Chopin, this form has been employed, and many celebrated arias in the vocal forms are but an application of the same general shape. It is a form most easily learned, and its mastery by the reader may help much toward correct phrasing.

Such compositions as Chopin's "Funeral March," Spindler's "Charge of the Hussars," Heins's "Silver Nymph," Wachs's "March of the Flower Girls," Bachmann's "Bluette Polka," Litolff's "Spinning Song," Mason's "Spring Dawn," Giese's "Floweret Forget-me-

not," and many other works to be found in the instrumental selections of "The World's Best Music," will give the student abundant opportunity to study these forms.

There is another form which is sometimes used in drawing-room music, which is practically an extension of the three-division song-form. It has five divisions arranged as follows:

Div. I. Theme, in tonic key.
Div. II. First countertheme, or episode, in a related key.
Div. III. Theme, as in Div. I, in tonic.
Div. IV. Second countertheme, or episode, different from Div. II and generally in another key.
Div. V. Theme again, as in Div. I.

This may be succinctly presented thus: A—B—A—C—A. As it is but an extension of a preceding form, some teachers call it "five-division song-form," but as Mozart, Haydn, Purcell, Gluck, and other masters have called it "rondo," it is better to keep to that name. The characteristic of the rondo-form is a return to the first thought, more or less frequently; and as this form does this, the name is most fitting. In Mozart's simplest sonata, in C major, the finale, which has exactly this form, is labeled "Rondo," and Gluck's "Che faro senza Euridice" is also marked thus in most editions.

An example of this form may be studied in Chopin's Mazurka in B flat, Op. 7, No. 1, in Vol. I, New Series, p. 16. In this charming composition we find the following form:

Div. I. Theme, twelve measures. Repeated.
Div. II. Episode, eight measures.
Div. III. Theme again, twelve measures. Divisions II and III are now repeated together.
Div. IV. Second episode, eight measures.
Div. V. Theme again, twelve measures. Divisions IV and V are now repeated together. There is neither introduction nor coda.

With one more form we can end our study of drawing-room music. Again we have an extension of a preceding form—the song-form with trio. Beethoven attempted an extension of this in the third movement of his Fourth symphony by mere repetition, his form here being as follows:

Part I. A song-form.
Part II. A trio.
Part III. The song-form again.
Part IV. The trio again.
Part V. The first theme of the song-form once more.

This can scarcely be called a good musical form, since it adds repetitions to a form which has an abundance of repetition already.

Schumann improved upon this idea of extending the song-form with trio by making Div. IV a second trio, different from the first. In his first symphony, in B flat, the scherzo has the following shape:

Part I. Scherzo.
Part II. First trio.
Part III. Scherzo again.
Part IV. Second trio.
Part V. The first theme of Part I.

After this there follows a beautiful coda in which fragments from the different divisions are blended.

Although this form is not much used in drawing-room music, Schumann used it in piano as well as other orchestral works. Mendelssohn's "Wedding March" is an example of the application of this idea. It is, however, rather free in some of its treatment. It can be analyzed as follows:

Introduction, five measures in length.

Part I. March. Three-division song-form. In this form, however, there are some points to be noted. After the first theme there comes a returning passage four measures long, which leads back to the beginning of the theme, which is repeated. The second division is an episode eight measures long. Part I is in C major.

Part II. First trio. A two-period song-form in G major, which presents a first period with an unusual antecedent of six measures and a consequent, by repetition, of the same length. Its second period is more conventional and is eight measures in length.

Part III. The return of Part I is represented by the theme only. Eight measures.

Part IV. Second trio, a two-period form in F major. Each period is here eight measures in length. After the end of this there comes a long returning passage of sixteen measures. This begins as if it were a new theme, but examination will show that what seemed to be a consequent does not lead to any close, but conducts us into the march again.

Part V. Return of the march, Part I, entire. The three divisions are clearly marked.

Now follows a brilliant coda. It begins exactly like the returning passage in Part I, but we must follow the inflexible rule—everything after the end of a letter is a postscript. Everything after a set form has been completed must be the coda. This coda is in itself a little composition. It has an introduction, then a new melody which is repeated, and then a showy close. But we need not subdivide here. All these parts only constitute an original and melodic coda.

MODERN MUSICAL TENDENCIES

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By Arthur Elson

THE chief factor in modern styles of composition has been the development of the orchestra. It is less than two and a half centuries since the idea of combining different instrumental groups was introduced into our music. In the day of Lulli, the strings played almost all the time, with now and then an alternating number for wood-wind. It was not permissible even to have one group begin a number and another finish it, for that would have been "broken music," which was against the law. But changes were in the air. The varied orchestras of Bach and Handel soon drew the attention of the world; and even if they do not influence our present orchestral ideas, they gradually simmered down into the so-called classical orchestra.

The classical orchestra, in the later days of Beethoven, included twelve kinds of instruments, and thirteen parts—first and second violins, violas, cellos, and double basses; flutes, oboes, clarinets, and bassoons; horns, trumpets, and trombones; with the kettledrum for percussion. From the wonderful skill with which he used these instruments, Beethoven has been aptly called "the liberator of the orchestra."

The modern orchestra has many new instruments. The chief instruments with pitch are the piccolo, English horn, contrabassoon, bass clarinet, and tubas. Others are sometimes included for special effects, such as the saxophone, heckelphone, celesta or xylophone, while the percussion group may include drums, triangle, gongs, cymbals, tambourine, etc. Thus we find a Wagner score containing at one time twenty-seven staffs, while Strauss used thirty-two for the battle in "Ein Heldenleben."

But the change from the classical orchestra is one of method as well as of size. Beethoven, and Brahms, who followed him, used the pure colors of the instruments. Each kind of instrument usually took a single note in the orchestral chord. But Liszt and Wagner brought in the custom of writing *divisi,* or letting some of the instrumental groups play in chords instead of single notes. This gives a remarkably rich effect of tone-color.

The addition of new instruments causes a more than proportionate increase in the number of possible combinations. Thus, if we disregard the percussion, and consider the average modern orchestra to have only sixteen kinds of instruments as against the twelve of classical times, we have a large increase even in pure color combinations. Figuring shows, for instance, 1820 possible combinations of four in the modern orchestra against 495 in the classical; 12,870 combinations of eight against 495; and 1820 combinations of twelve against a single one. Not all are feasible, but the proportion is the same in both cases. When we think how we may add possibilities by writing *divisi,* we begin to realize that composition for the modern orchestra is a large field.

We say that Liszt, or Wagner, or Strauss, has mastered the modern orchestra, and many think that the only road to success lies in imitating these men. Wagner made such an advance in orchestration that few could follow him at first; but now his complexity is found everywhere. Wagner admired such a clean-cut classic as Mendelssohn's "Hebrides" overture, and thought his own style unsuited for the concert stage; but the symphonic poem for full modern orchestra has apparently come to stay. With its arrival we have learned that no one man, great though he may be, can exhaust the possibilities of modern orchestral music.

By its very size and variety of tone-color the modern orchestra has led music into a period of formlessness and impressionism. Strauss stands as the militant leader of this school. Not only does he give us free tone-pictures of his own, in most autobiographical fashion, but he insists that all music is programme music to its composer. This may now be impossible to disprove, as the modern men all indulge in tone-painting, and the older masters are dead. But it seems ridiculous to imagine that a Bach fugue or a Beethoven sonata had to have a programme. Strauss and others may indulge in tonal pictures, descriptive or narrative; but that does not prove that every one did so. The old style of clean-cut form, contrast, and development was revived by Brahms, who wrote for the classical orchestra; but attempts have been made, by Bruckner, and others, to use the modern orchestral forces in the cause of pure music. Both schools deserve detailed attention.

Strauss is an apostate from the cause of pure music. When he wrote his F minor symphony he was a follower of Brahms. But Alexander Ritter converted him to the programme school, in which he has made his greatest triumphs. As the word programme refers to some printed story which the orchestra illustrates, there is naturally much latitude in method. The music may be subjective, as in "Death and Transfiguration," or objective, as in "Don Quixote." The latter is the weaker style, for music is at its best in expressing emotions, and at its weakest in depicting objects or events. But Strauss has led us too far on the objective path. The death of Till Eulenspiegel is masterly enough, but in "Don Quixote" the flock of sheep, the upsetting boat, and even the aërial voyage on the wind-machine, are too literal to move us, though we admire the composer's cleverness. The characters in the "Domestic Symphony" do not arouse our sympathy but appeal only to our curiosity. It is probable that posterity will regard "Death and Transfiguration"

as the greatest of the tone-poems, because of its subjective tendencies, the universal appeal of its theme, and its really great musical beauty.

Mahler has written works that he calls symphonies; but whatever of symphonic form is present is submerged beneath a too dramatic style. So intense is his music, and so varied and contrasted are his effects, that it seems as if he wished to write programme music without giving a printed programme with it. In his later symphonies he has often used voices, which makes the orchestral part merely a large accompaniment illustrating the words.

Hausegger has written beautiful symphonic poems, using the richest melodic and orchestral coloring in excellent fashion. Huber has made his great Böcklin symphony a musical echo of that artist's glorious paintings. Weingartner has put one of these pictures into a symphonic poem, and Rachmaninoff has used another in the same way. The modern tendency seems to be toward symphonic poems, either openly so called or thinly disguised as programme symphonies. The infinite variety of modern orchestral coloring has made this desirable, and given a legitimate excuse for new effects in orchestration. There is always the danger of going too far, as Strauss has sometimes done, and using these effects for their own sake instead of confining one's self to a reasonable expression of the subject. As the poet says,

> It is excellent
> To have a giant's strength; but it is tyrannous
> To use it like a giant.

Not every one has the giant's strength necessary to handle the full modern orchestra, and very few use it rightly. Because the orchestral effects are almost limitless, we revel in them, and admire them as a child admires the ever-changing kaleidoscope. But they should be a means rather than an end, and the great composer should use them to form a noble orchestral picture. Strauss has done this in the above-mentioned "Death and Transfiguration," if not in all his works; and it is probable that future generations of composers will master the manner and devote more attention to making the matter worthy. We cannot expect a Wagner to arise with every generation, but we should have earnest and serious work. In fact, we are already beginning to get it, and a work like Gernsheim's tone-poem "To a Drama" is an excellent example of a well-balanced modern composition. Wagner spoke of the free style as a "sea of tone"; many have been drowned in that sea, but men have now learned to keep afloat in it at least, and some even move forward.

But the new style, great as it is, is not everything. As stated above, Brahms showed that the classical symphony did not end with Beethoven, and is not necessarily a thing of the past. His music, even though it does not wear so well as Beethoven's, shows conclusively that strict form is not a fetter to genius. But the complexity of modern harmony acts as a temptation to the free style. The strict symphony demands a particular kind of musical expression—the ability to choose impressive themes; a blending of intellectual and emotional, which always results in the highest music; and good judgment in the matter of length, balance of structure, and contrast of style. The intellectual factor is usually lost in the free style, which becomes wholly emotional and dramatic, and often fragmentary.

Brahms wrote for the classical orchestra, but it is quite possible to use the full modern orchestra, in the cause of pure music. The great exponent of this school is Bruckner, who has only recently come into his own. As we should naturally expect, Bruckner's style is more dramatic than that of Brahms; but the work of Bruckner shows the proper union of intellect and emotion, and the excellent logic of form and development. His symphonies are intensely earnest, and in spite of some unclearness they should serve as admirable models for the young composer.

Reger, branching out from organ composition, has written some effective work in the larger forms. Best known is his Op. 100, the Variations and Fugue on a Merry Theme of J. A. Hiller. It has no programme, but charms by its beauty. Yet the variations are very free, and are really almost as unfettered as Huber's programme symphony. So we must fall back on Bruckner as the real modern champion of form.

The Beethoven of the modern orchestra has not yet arisen. Strauss is our great orchestral virtuoso, but Beethoven in his time was more than that. We cannot have a genius for the asking, but when the new master does come he will have a far greater vehicle of expression than had Beethoven. Yet it may be that such a man would not be encouraged to develop his powers; for music tends to become more and more emotional and dramatic and involved as it proceeds, and does not seem to move in cycles. Even Brahms was an isolated phenomenon.

Perhaps the most debated development in modern music has come from France, and reaches its culmination in the works of Debussy. France has a more conventional school, which finds its expression in the melodic and harmonic grace of Massenet, Saint-Saëns, and Chaminade. But Franck and his pupil Vincent d'Indy led the way to a more robust and less saccharine development. The latter is earnest and sincere in all he does, but his symphonies are somewhat austere in character. There is a bitter flavor about them that is often a refreshing contrast to the cloying sweetness that some composers give us.

But the harmonic changes in these works are often so sudden that the music seems fragmentary, and this tendency should not be allowed to run riot. It is probable that the cause is cerebral; by excessive familiarity, the composers grow tired of the ordinary harmonies, just as a Paderewski grows infinitely weary of piano works that he has practised constantly for concert performance. Hence there is a search for new harmonic effects, and the composers then find that they have gone somewhat beyond their public. This reaction from the broadly emotional to arbitrary and abstruse harmonies has resulted in a school that is already named cerebral music. Such music has its place in the scheme of things, but its composers exaggerate its importance and think that the purer and simpler harmonies of the past are out of date. The advanced faction, and especially Debussy, have often made themselves ridiculous by silly criticism of others. Schumann has been their special target, but his broad and noble harmonies live on in spite of his detractors. It is almost too early to estimate the value of the new

school; one cannot tell whether future generations will grow toward it or away from it; but it is not universally accepted at present. Whether the bitter will wear better than the sweet is a question for time to decide; but the present writer thinks the style too unemotional to last.

Debussy himself seems a result of physical conditions. Extreme delicacy is the keynote of his nature, a delicacy that seems the antithesis of crude and strong emotion. As a boy he was not thought especially musical, but his hearing was very acute. In regimental service he used to take great delight in listening to the overtones of bells and bugles. In his orchestral music he sometimes uses the higher instruments to reinforce the overtones of the lower ones—a discord to many, but no doubt recalling the sweet memories of youth in his own ear. Out of the chord of nature, formed by the overtones, he may have constructed the whole-tone scale that he often uses. As might be expected from the state of his hearing, almost all his work is soft or lightly orchestrated. There is no strong emotion in his scores but rather a fastidious delicacy, a mood of elfin daintiness, that forms merely one *genre* of music, and not even the most popular one. The musical fairies of Weber and Mendelssohn show just as much charm, though a simpler harmonic style. Some few think Debussy's orchestral works the *ne plus ultra* of musical expression; but Bach, Beethoven, and all the great masters remain unshaken by this tempest in a teapot. Debussy's real strength lies in his piano works; there, though he has not superseded the great fugues and sonatas of the past, he has given us interesting and attractive tone-pictures. Many of these are very beautiful, but this is partly because he does not always include in them an excess of unusual harmonies. In the piano field, the works of Fauré are in a somewhat similar vein.

It is probable that the search for strange harmonic gods is merely a passing phase. When Debussy was a student he would say, "I do not understand your harmony, but I do my own"; and he had to write in a style foreign to himself when he composed the beautiful "Prodigal Son" that won him the Prix de Rome. But the tendency exists in other lands besides France. In our own country, Loeffler is a true harmonic impressionist, getting results of great beauty from blurred and blended chords. Such a work as his "Death of Tintagiles" is an effective mosaic of orchestral phrases. Strauss too feels the tendency, and mars his grand structures by the use of ugly thematic material. Music is entirely a matter of taste, and taste is not always the safest guide. The attacks on Beethoven and Wagner, for instance, finally gave way to admiration. But Debussy is not a new Beethoven, nor Strauss a noble poet like Wagner, either in word or tone, nor is their work yet worthy of being called "the music of the future." It is fairly well understood and analyzed even now, and found wanting in certain respects. Some think that music is decadent, and that Debussy represents the refinement and Strauss the cold intellectuality that come when the crude strength of an art is waning. But even if we have no wholly satisfactory genius at present, the future is our own. Somewhere around 1720, the French composer Rameau, believing that the harmonic combinations had all been exploited, said, "Music is dead." But Bach and Handel were just then giving the art a new lease of life in Germany and England, and ever since then it has been a pretty active corpse; so that we need not fear any dissolution just now.

Schools of music based on the folk-song are not a new idea, but they have been flourishing in different countries ever since Weber founded the romantic school of German opera. The most noted treatment of native folk-song is that of the Norwegian Grieg. His successor seems to be Sinding, who does not cling quite so closely to the actual form of the folk-song, but is still the rightful heir to the musical spirit of his country. Sweden also has her quota of composers, led by Sjögren, Hallén, and Stenhammar; but a greater than these has arisen in Finland, in the person of Sibelius. He is not a maker of folk-songs, but his works sum up the music of his native land in lofty style. There is in all his compositions a deep earnestness and noble dignity that are a true echo of his people's greatness of character. There are other Finnish composers, such as Krohn, Järnefelt, or Kajanus, as well as the earlier Pacius; but Sibelius is decidedly *primus inter pares*.

The Russian school, with which we are only now becoming familiar, is based largely upon folk-music. The songs of Russia are interesting and varied, and the large number in minor are often especially graceful and effective. Their character may readily be noted in Rimsky-Korsakov's overture "La Fiancée du Tsar," or in Tchaikovsky's "1812" overture. The very mournful kind is illustrated by the opening theme of the sonata-allegro in Tchaikovsky's fifth symphony. When Glinka founded the Russian school with his opera "A Life for the Czar," it was so largely based on folk-songs that the critics called it *"Musique des Cochers";* but a whole nation went wild over it. After a transition period, represented by Dargomyzsky and Serov, the school of native music was especially cultivated by five men—Balakirev, Borodin, Cui, Mussorgski, and Rimsky-Korsakov. Rubinstein and Tchaikovsky were held to be too cosmopolitan. Tchaikovsky especially was greater than the limits of nationalism would permit, although he could handle the folk-song as strongly as any of them when he wished. The five national composers, however, held it their first duty to use the folk-song style. Oriental melodies were sometimes used, as in Balakirev's "Islamey"; but the Russian predominated. A new generation of composers has grown somewhat away from the strict national ideas. Glazunov was never a decided follower of folk-ideas, but the creator of a melodious style of his own. Liadov varies between folk-songs and symphonic poems of decided programme tendencies. Rachmaninoff is a disciple of Tchaikovsky, and yields to the desire for modern tone-pictures; while Scriabine imitates the orchestral style of Debussy, but with more virility if not more musical sanity.

The folk-song in the hands of great composers is a double source of strength; it brings the composer in touch with his public, but it also shows that that public is musical and capable of being educated to a high standard. Russia and the Scandinavian lands are examples of this musical capability, while Italy has no good folk-song school, and England has almost forgotten hers. In our own country, Dvořák showed us

what could be done with the plantation style, but our Indian music is not well enough known to form the basis of any real school.

The past of England has been glorious. Before the year 1100 she developed a New Organum from that of Guido by adding contrary motion to the parallel and oblique motion of the system he developed from Hucbald. In the next century England saw the invention of measured notes and the development of counterpoint, as shown by the famous canon "Sumer is icumen in," dating from about 1215. Dunstable's later school led the world in the fourteenth century, and another famous English school of counterpoint flourished in Elizabeth's time. The rise of sonata and opera, furthered in England by Purcell, was succeeded by a long decay which made it possible for Dvořák to say, "The English do not love music; they respect it." As for counterpoint, no composer now gives it a leading place, and we have to return to Bach for it.

The academic conventionality of England's recent "renaissance" has now given place to more advanced work. Elgar has been the leader, and his variations still win praise everywhere; but in his first symphony he has echoed Vincent d'Indy's austerity without the Frenchman's inspiration or conciseness. His violin concerto, similar in style, is full of difficulties. Like Saint-Saëns, he seems to prize technique unduly, as though wishing to alter the proverb and claim that "virtuosity is its own reward." Coleridge-Taylor, the first great negro composer, revels in rich harmony and orchestration, as shown by his "Hiawatha's Wedding Feast." Others of the composite modern school are Bantock, Holbrooke, and Delius. Bantock's works show richness of color, good ideas, and an Oriental fancy, united with a complex style. Holbrooke at first showed the ugliness of Strauss without his inspiration, but is now writing more pleasing music. Delius has a style somewhat like Debussy, but can compose broad and effective works like "A Mass of Life." Cyril Scott writes piano pieces in the Debussy vein, but his larger works do not succeed. Edward German deserves decided praise for reviving the old English folk-song style, which he does in a remarkably dainty and graceful fashion.

Italy is now fairly awakened from a period of musical decay. All that she could show in the first half of the nineteenth century was a meretricious school of opera, carried to success by the singers or by comedy in the libretto, but musically worthless. Sgambati led the revival of instrumental music in Italy. In the sixties taste was so poor that a Beethoven symphony given by him drew scarcely any auditors; and Pinelli gave a concert, with sixty musicians, that brought in only fourteen francs to pay them. Royal patronage could not prevent opposition to orchestral music and German influence, but gradually the higher school won its way. Where Sgambati worked alone at first, we now find Martucci, Franchetti, Bossi, Wolf-Ferrari, Pirani, Busoni, and others. Aside from opera, in which he too plays his part, Wolf-Ferrari is the most interesting figure. His cantata "La Vita Nuova" is a charming union of modern harmony and ancient simplicity. Martucci, famous as a pianist, has played his own concerto with excellent results. Busoni does the same, though he has been active in many fields. Pirani, living in Heidelberg, celebrated that center of learning in a symphonic poem. Bossi, who is an organist, has written many large works for his instrument and an immense symphonic poem for voices and orchestra—"Paradise Lost." Franchetti, highly praised by Italian critics, is known for both orchestral and operatic music. Italian oratorio has been revived by Perosi.

Modern opera has been slow in developing, because Wagner's tremendous genius set a standard which others have striven to reach—and failed. But German influence came slowly to Italy, and the change there was gradual. Ponchielli made the first advance over the Rossini school when he wrote "La Gioconda." Boito's "Mefistofele" proved a dignified and worthy work, which is only now coming into its deserved prominence. Verdi's growth from "Don Carlos" through "Aïda," "Otello," and "Falstaff" is a matter of history. The development of the short opera began with Puccini, whose "Le Villi" was produced in 1884. But Mascagni brought it to world-wide notice with his "Cavalleria Rusticana," and gave it a crude strength of treatment, both in music and subject, that has made him known as the founder of the realistic "verismo" school. Leoncavallo at once followed it with "I Pagliacci," musically a much stronger work. Others are still imitating the style, but neither of these two has been able to win further success, and no new developments seem to come from the school. Giordano, Tasca, Coronaro, and Cilea have written works of some power, but Puccini in the serious field and Wolf-Ferrari in comic opera have both drawn away from the cruder side of realism. Verdi spoke of Puccini as his successor, and his words have come true. Puccini's "Edgar" and "Manon Lescaut" are not great successes, but "La Bohème," "Tosca," and "Madame Butterfly" have captured the world, and "The Girl of the Golden West" is not far behind them. But when all is said, Puccini seems sometimes a great talent rather than a genius. He uses the continuous melodic recitative in good declamatory fashion; he is a master of orchestration, and subordinates the instruments to the voice very skilfully; he employs a rather involved harmony, but it wears well and shows a real individuality. He chooses librettos that interest for their own sake, and would help to carry poorer settings to success. His music is often great, but it shows art rather than virility in its continuous symphonic accompaniment. But if sometimes unequal, Puccini is usually very great;

> And if his art as artifice you score,
> Where have you seen such artifice before?

The greatest of the works mentioned above is "La Bohème"; and to make poverty in a garret interesting on the operatic stage is surely an achievement of real art.

French opera shows the two extremes of Massenet and Debussy. The latter's "Pelléas and Mélisande" has all the most pronounced Debussy qualities; and his refined subtleties and shadowy delicacy are certainly well suited to the subject. Once he thought of writing a "Tristan and Isolde," but the idea was laid aside—perhaps wisely. Dukas, admired for his orchestral picture "L'Apprenti Sorcier," has produced the opera "Ariane et Barbe-Bleue," which is growing in favor. Massenet clings to a simpler style that is pretty but very

thin, though his "Navarraise" belongs to the "verismo" school. Bruneau is an apostle of realism, but rather heavy-handed. Chabrier's "Gwendolen" is a legendary work in Wagnerian style. Vincent d'Indy's "Fervaal" is in the same field, while his "L'Étranger" is a work of mystic symbolism. Charpentier's "Louise" is a strong opera, in part a protest against the hard lot of working girls, with poverty always driving them into danger. It has a prose libretto.

In Germany, of the operas since Wagner, many are heard but few are repeated. Kistler, Schillings, and others have striven unsuccessfully to imitate the Wagnerian manner, while Siegfried Wagner has failed altogether. Bungert's hexalogy, "The Homeric World," deals with subjects from the "Iliad" and the "Odyssey," but does not seem very successful. Kienzl's "Evangelimann" has met with more recognition, having been given in hundreds of places and translated into several languages. It is based on a real incident of the eighteenth century, the hero being wrongly imprisoned in place of his brother. Of somewhat more recent date is D'Albert's "Tiefland," an often-given work describing a love that retreats to the hills in order to escape the intrigues of a wicked lowland alcalde. Among the younger men, Leo Blech has taken a prominent place with his bright "Versiegelt." In other lands, the lively style of Smetana's "Bartered Bride" makes many wish that his later operas were better known. Dvořák won some success in opera, while Fibich has written also great melodramas (with spoken words) like "Hippodamia." The melodrama is a comparatively untried affair, and may become important in the future. Strauss used it excellently for the piano in his "Enoch Arden," while Schumann's "Manfred" is a classic in the form of elocution against musical accompaniment.

Hungarian opera composers include Erkel, Zichy, Hubay, and the more recent Rekai. Among the Poles, Paderewski's "Manru" is not proving popular, and his symphony shows extreme seriousness. In Russian opera, Glinka is popular, Dargomyzsky Wagnerian, Rubinstein too symphonic, Tchaikovsky light, Cui conventional, Borodin national, Rimsky-Korsakov effective, Mussorgski intense. Glazunov has aided a reaction in favor of the ballet, while Arensky clung to opera with his "Nal and Damajanti." Tanejeff's "Oresteia" is slow-moving, but lofty and dignified. Rachmaninoff's "Avaricious Knight" is strong, but gruesome.

In 1893 Humperdinck sounded a new note with his beautiful "Hänsel und Gretel." It showed that operatic music could be written along legitimate lines, without any imitation of Wagnerian mannerisms, and deeper in character than the highly spiced "verismo" effects. It is one of the most charming of all stage works, and perhaps the most important German opera since Wagner's time. "Königskinder" is a more recent success in the same vein. The renown of "Hänsel und Gretel" led Goldmark to try the school with his "Heimchen am Herd," but Goldmark was already known for his "Queen of Sheba," and his "Merlin" contained much beautiful music. His later works include "Die Kriegsgefangene" (Briseis), "Götz von Berlichingen," and "The Winter's Tale." Strauss has followed his "Salome" and "Elektra" with a comic opera, "Der Rosenkavalier," in which his orchestral power and pictorial ability are employed in a quieter style than usual. The merits and defects of Strauss show in his serious operas. He builds great structures, but often with poor material; he uses his ample power and drowns the singers; and he loses reserve in vehemence. But his descriptive ability is eminently in place, and, even though he may be a great individual rather than the founder of a school, his operas have almost surely come to stay.

Modern song shows the most finely artistic character. The best examples are the lyrics of Strauss, which contain many gems "of purest ray serene." Some of his songs seem too modulatory or fragmentary at first, like "Nachtgang," but repeated hearing and familiarity with the words bring out the unity. There is no doubt about the instant beauty of "Die Wasserrose"; but all the songs are finely effective. A chiseled beauty of detail, as in "Traum durch die Dämmerung," makes some critics think them unemotional; but this is not really true unless all art is expected to be of the "Sturm und Drang" period. The rare charm of the songs shows that if Strauss sometimes uses ugly themes for the orchestra, he does so from choice and not necessity.

Other German song-writers include Hugo Wolf, Weingartner, and Mahler. In France, Debussy shows his usual ethereal delicacy, which gives excellent and beautiful results. Fauré is not far behind. Elgar writes lovely lyrics in England, his "Sea Slumber Songs," with orchestra, being a noble group. Coleridge-Taylor, Bantock, German, Quilter, and others also do worthy work. Coleridge-Taylor has followed his "Hiawatha" set with other cantatas, while Elgar's "Apostles" and "The Kingdom" and Bantock's "Omar Khayyam" are great modern choral-orchestral successes.

ANECDOTES OF MUSICIANS

ANECDOTES OF MUSICIANS*

WHIMS OF COMPOSERS

COMPOSERS sometimes have peculiar ideas as to the places or circumstances in which they must work in order to obtain the best results. After working habits are once formed, the regular accompaniments to composition often seem necessary.

Haydn thought he could not compose unless he had on the ring which Frederick the Great sent him; and, besides this, the paper on which he wrote must be white and of the best quality. Gluck wrote best when seated out in the middle of a field. Rossini was most productive of good music when "lined within with good sack wine"; and he and Paesiello both enjoyed composing while in bed.

Sacchini enjoyed having a pretty woman by his side —by the way, several of the great composers had no aversion to such an accompaniment, whether composing or not—and his pet cats must be playing around him. Mozart could compose beautiful music while playing billiards or bowls. Zingarelli prepared himself for writing music by reading the Scriptures or some classic author, and Sarti liked best a funereal gloom lighted only by a single taper.

Beethoven could compose best during or after a brisk walk in the woods and fields, and many of his greatest works were inspired by the beauties of nature.

Cimarosa and Méhul were opposites in this matter. The former wished to be surrounded by a dozen gabbling friends. The light conversation and flow of spirits (probably of two kinds) seemed to inspire his music. On the other hand, Méhul once went to the chief of police of Paris and asked to be imprisoned in the Bastille. That personage in surprise inquired the reason. Méhul said he desired to get away from the noise and bustle of the city, and to escape from the good graces of his friends for a time, that he might give his whole mind uninterruptedly to composition. It is needless to say that his wish was not granted. Few would wish to be surrounded by the walls of the Bastille, unless it were to write a tragic overture or a funeral anthem.

Wagner thought he must be clothed in the costume of the age and place in which was laid the plot that he was then working on. He also desired a perfectly quiet and uninterrupted time in which to write. His family was denied admission to his study and he would not even see any letters that came for him; his meals were passed in to him through a trap-door.

HANDEL'S PERSUASIVENESS

THERE was a day when players and singers so ruled directors and composers, that they hardly knew whether they could call their lives their own. But that day is past, and Handel was one who prominently assisted in bringing about the new order of things. Two instances will serve to show how he controlled his unruly singers.

When Carestini was given the beautiful aria "Verdi prati," in "Alcina," he sent it back to Handel saying it was too trivial for him to sing in public. Handel rushed off to the singer's rooms and, foaming with rage, yelled to the astonished Italian:

"You tog! Don't I know bedder ash yourself vat ish best for you do sing? If you do nod sing all de song vat I gifs you, I vill not pay you ein stiver!"

Nor could this choleric composer be bullied by the weaker sex. At a rehearsal of one of his operas, the great soprano Cuzzoni gave him great trouble by her impudence. Finally she refused to sing a certain aria. Handel concluded that the time had come to see who was master; so he rushed on to the stage and, catching the astonished prima donna around the waist, dragged her to an open window, crying: "I always knew you was a very teufel, but I vill show you I am Beelzebub, de prince of de teufels!" Then he threatened to throw her out headlong unless she promised to sing the song. Cuzzoni was frightened half to death, and begged to be released, promising to do anything he might require.

MAKING THE DUMB SPEAK

IT does not always do to estimate the value of things by their size. Some of the choicest of valuables are wrapped in the smallest parcels. And the best brains and keenest intellects are frequently the possessions of the most unpretentious-looking folks. The Sicilians tell a pretty story about the Abbé Perosi, the young Italian priest-composer. The unpretentious little cleric was wandering about a cathedral examining everything, and was an absolute stranger. He fell into conversation with the custodian, who confided to him plaintively that no one, not even the organist himself, understood the "action" of their remarkably fine instrument. On hearing this, the visitor diffidently asked if he might be allowed to try the organ. After some demur, consent was given. Perosi sat down and began playing very quietly. One by one he pulled out stops and rendered combinations which had never been known before. The rolling volumes of sound filled the hearers with amazement. Like lightning the report spread, and tidings of the wonderful music soon crowded the cathedral. They then learned the name of the player.

DON'T STOP!

"IPHIGÉNIE EN TAURIDE" is probably the most perfect example of Gluck's school in making the music the full reflex of the dramatic action. While Orestes sings in the opera "My heart is calm," the orchestra

* A portion of the material given here has been taken by permission from "Anecdotes of Great Musicians," by W. FRANCIS GATES.

continues to paint the agitation of his thoughts. During the rehearsal a musician failed to understand the exigency, and ceased playing. The composer (who frequently conducted in nightcap and dressing-gown) cried out in a rage, "Don't you see he is lying? Go on, go on; he has just killed his mother!"

NEW RÔLE

The world is pretty familiar with stories of Handel's irascibility of temper. This temperament, however, was balanced by an exceptional proportion of that rare compound common sense, and this would suggest that the all-powerful harmonist did not rage furiously without cause. In instance of his equable mind there is a story. It is not often that composers will crouch before their librettists; yet, when composing "The Messiah," Jennens, the compiler of the words, found fault with some of the settings, which were "not so good as he [Handel] might and ought to have written." Handel took the criticism mildly. "Be pleased," he wrote to Jennens, "to point out those passages in 'The Messiah' which you think require altering." This was done, and the composer made many alterations and improvements from time to time.

A MUSICAL SURNAME

Rossini's memory was anything but retentive, especially in respect to the names of persons introduced to him. This forgetfulness was frequently the cause of much merriment whenever he was in company. One day he met Bishop, the English composer. Rossini knew the face well enough, and at once greeted him: "Ah! my dear Mr. ——" for the life of him Rossini could get no further; but to convince his friend that he had not forgotten him, Rossini began whistling Bishop's glee "When the Wind blows," a compliment which "the English Mozart"—as Bishop has been called—immediately appreciated.

It is a fortunate thing for musicians that their memory of music is not so unreliable as it would seem to be in respect to many of the mundane conditions in which they live and move—particularly in an age which is given over to feats of musical memory in every branch of the art. Otherwise, where would a Bülow be? His feats of musical memory were, as many will remember, simply stupendous. One day a young composer called on Bülow to ask his opinion of a pianoforte concerto, when the latter stated he was too busy to look at it at the moment, but would do so at his leisure. At a party that evening Bülow was asked to play, and to the amazement of the young composer, who was present, he sat down and played the entire concerto from memory. When he was director of the famous Meiningen Orchestra, not content with conducting without a score, he endeavored—but without success—to induce the members of his band to learn their music by heart.

BEETHOVEN DISCORDS

Like most men who are quite unable to take care of themselves, and still less qualified to foster, care for, and love a wife, Beethoven was ever on the lookout for a partner. Once or twice a Mrs. Beethoven was on the very verge of becoming a realization and a positive fact. Happily the business did not come off—fortunately for the ladies. His temper and peculiarities made it impossible for him to live peaceably with mankind. Had he poured the vials of his wrath upon a Mrs. Beethoven in anything like the measure that he adopted with his servants, there would have been squalls and a particularly uncomfortable time for the better half. His diary tells us: "Nancy is too uneducated for a housekeeper—indeed, quite a beast." "My precious servants were occupied from seven o'clock until ten trying to light a fire." "The cook's off again—I shied half a dozen books at her head." "No soup to-day, no beef, no eggs—got something from the inn at last." These are samples of comments upon domestic surroundings abounding throughout his letters.

A WHOLE REST

Nowadays, when in so many homes there is the inevitable piano with its inevitable music, the domestic instrument is often regarded as a nuisance rather than a comfort, especially in suburban districts. Disturbed minds looking for some abatement of the evil may be glad to know of the method adopted by Weyse, the eminent Danish composer. Of course no good results are likely to accrue unless the remedy be as thorough as was Weyse's. He was much worried by the mournful and incessant tinkling of a superannuated piano, the property of a family resident upon the floor immediately beneath his apartments. Morning, noon, and night he was disturbed by the melancholy strummings, which he said caused him to lose some of his happiest inspirations. One evening, as he sat in his study, deeply excogitating a *Leitmotiv* for the second movement of his new symphony, a burst of more than usually discordant sounds came from the abominable instrument below, at once scattering his ideas. He was desperate, and, attired as he was in dressing-gown and slippers, hurried down-stairs and rang his persecutor's door-bell. He was admitted to the room containing the terrible piano, and found there a large and gay company, which welcomed him with effusion. After bowing gravely to his host and hostess, he sat down before the open piano without uttering a word, and played one of his own fantasias, a particular favorite of the Copenhagen public. When he had concluded he shut the instrument, locked it, put the key in his pocket, and again bowing to the master and mistress of the house with a sardonic smile, departed as he had come, in profound silence. For the remainder of that night at least the engine of his discomfiture was mute.

NO MORE PEARLS

The detestable habit of looking upon instrumental music as a mere cover for conversation, which, even now, has not died out in certain social circles, seems formerly to have been very prevalent in various parts of Europe. Most of the poor musicians dependent upon the smiles and fees of their patrons tolerated the nuisance. Some would not—Handel for instance. In Beethoven the offenders met a tartar. While playing a duet with Ries at the house of Count Browne, at Vienna, Beethoven was disturbed by the conversation of a young nobleman with a lady. Suddenly he

lifted Ries's hand from the instrument, saying in a loud voice, "I play no longer for such hogs." Nor would he, though importuned. This has been brought against him as a breach of good manners, but surely the insult to the musician was at least an equal breach of good taste!

A SCRIPTURAL REMINDER

JOSQUIN DE PRÈS, chapel-master to Louis XII of France, was an ecclesiastic as well as a musician, and when he was first admitted into the service of this excellent prince, had been promised a benefice. The promise, however, was forgotten, and Josquin, being inconvenienced by the shortness of the King's memory, took the liberty of publicly reminding him of his promise. Being then under command to compose a motet for the royal chapel, he chose part of the 119th Psalm for his subject: "Oh, think upon thy servant as concerning thy word!" which he set in so exquisite and supplicating a manner, that his Majesty took the words to heart and soon bestowed the promised preferment. For this act of generosity, Josquin, with equal felicity, composed, as a hymn of gratitude, another part of the same psalm: "O Lord, thou hast dealt graciously with thy servant."

But that Josquin was not entirely dependent upon the words for his musical inspiration is abundantly proved by another composition of his to the syllables, "La, sol, fa, re, mi." Josquin, tired of the royal procrastination already mentioned, applied to a friend at court to use his interest in his behalf. But the friend was quite as bad as the King. He was always protesting his zeal to perform the service when a favorable opportunity presented itself, constantly concluding with the assurance, "I shall take care of this business —*let me alone.*" At length Josquin, tired of this vain and fruitless pledge, took the oft-repeated words of his friend, "laissez moi faire" (*lais-se fai-re moi*), which, by a slight facetious alteration, became the syllables of the scale, and set them to music. The result was admirable.

OPPOSITE POLES

"EAGLES do not bring forth doves" is a somewhat trite axiom. We should not expect therefore to find *acquilæ* such as Wagner and Schumann agreeing for any length of time together. Each once described the other. "Schumann," quoth Wagner, "is a highly gifted musician, but an *impossible* man. When I came from Paris, I went to see Schumann. I related to him my Parisian experiences, spoke of the state of music in France, then of that in Germany, spoke of literature and politics; but he remained as good as dumb for nearly an hour. One cannot go on talking quite alone. An impossible man!" Now for Schumann's side: "I have seldom met him; but he is a man of education and spirit. He talks, however, unceasingly, so that one cannot endure it for very long together."

OVEREXERTION

THE habit, at one time so prevalent among composers, of writing their music down with slight indications to the singer, soon had its natural consequence in the fashion for singing for mere display of skill. Happily the rage for vocal fireworks is passing away, and the "fritterers" or "embroidery-workers" in music now find little opportunity for show. Weber had a firm, yet gentle, method of protest against what he held to be a musical abomination. On one occasion he was present at a rehearsal when one of the principal singers was indulging his decorative propensity. Quietly looking at him, Weber said: "I am very sorry you are giving yourself so much trouble." "Oh, not at all," was the cheerful reply. "But you are taking great pains," he said. "Why sing so many notes besides those in the book?"

A SHARP BARGAIN

HAYDN was one of those who shuddered at the idea of calmly subjecting himself to the impulses of Briton, Pole, or Greek when armed with a tool which might momentarily be poised and descend upon him as an instrument of destruction. He therefore shaved himself. When in London in 1787, he lodged in High Holborn, opposite Chancery Lane. One morning, Bland—a cute music-publisher—looked into the composer's room and found him in the act of shaving. As usual, the razor was unworthy its work. "I would give my best quartet for a good razor," testily growled Haydn. Bland took him at his word. He bolted to his room in the same house, grasped his finest piece of cutlery, and presented it to the composer. Haydn retracted not a syllable. He went to the drawer of his escritoire, pulled out the manuscript of his latest quartet, and coolly handed it over to Bland. That composition is to-day enjoying the familiar name of the "Rasiermesser," or "Razor Quartet."

A LEFT-HANDED COMPLIMENT

FIFTY years' sojourn in the capital of France was not without its effect upon Cherubini. He learned much of the ways of Parisian society, its characteristic wit, and its mode of dealing with friends and foes. One day a friend presented himself before the master with a score, said to be Méhul's. After examining it, Cherubini remarked: "It is not Méhul's; it is too bad to be his!" "Will you believe me, M. Cherubini, if I tell you it is mine?" said the visitor. "No! It is too good to be yours!" replied Cherubini.

"LIKE ZWEI GOTTS"

PACHMANN, the pianist, is so full of whimsicalities, of grimaces and odd doings, and withal is such a superb player, that he has been characterized by one epigrammatic writer as "having the soul of an angel in the body of an ape," and by another as "a combination of specialized wisdom and undifferentiated dam-foolism."

An instance of this latter element of his character took place after a recital of his in New York. A pianist of some note went on the stage to congratulate him on his brilliant performance. He found Pachmann pacing up and down the stage exclaiming in fury:

"Ach Gott! Dese Ameri*ken* beeples, how dey do—dey know not mus*eek!* I vill go back to my Jerman*ie*.

Here dey know notings. I blay like von gott and vat dey do?"

Taking his hand, the visitor tried to assuage his wrath by saying, "Yes, yes, Mr. Pachmann, you did play like a god."

Whereupon the irrepressible combination of egotism and genius burst forth:

"Blay like *von* gott! I blay like *zwei* gotts, and dey do notings!"

A SUDDEN CURE

He who undertakes to manage an opera troupe chooses a road beset by thorns. Opera singers, especially if their salaries be high and they feel they can afford to follow their own sweet wills, generally do about the exact opposite of what a sensible person would predict. The manager must be ready for any emergency and be surprised at nothing.

At one time when Madame Gerster was billed to sing in St. Louis, she suddenly sent word to the manager that she was ill and unable to sing her part in "Lucia," which must be given that evening. He suspected the indisposition to be not very serious, but requested a medical certificate to put before the public to satisfy them for the non-appearance of the songstress. Gerster declined to be seen by a physician, saying her word was as good as her bond, and that when she said she was ill, that settled it.

The manager insisted upon calling in a physician, who asked to see her tongue. So, as she was leaving the room, she derisively stuck out her tongue at him, with the exclamation, "There!" The doctor at once wrote out a certificate, saying that the epiglottis was irritated, the uvula contracted, and the tonsils inflamed.

When Gerster was shown this certificate she grew quite angry, and insisted upon singing that night, "just to show what an ass that doctor was."

All the same, the doctor sent in his bill for $60.

KEEP IN WITH THE ACCOMPANIST

It is good policy for a singer to keep "on the good side of" his accompanist. A really fine accompanist is a *rara avis*. Besides the technical skill necessary to a soloist, an accompanist must have the finest musical feeling and discrimination, and at the same time sacrifice himself to the interests of the singer.

And often the accompanist has to shoulder the sins of the singer. It is an easy way to relieve one's self from the blame of a "bad break" to charge the fault to the accompanist. A singer once tried this with Handel, and declared that if Handel didn't accompany him better he would jump over on to the harpsichord where the player sat, and smash it. Said Handel:

"Let me know ven you vill do dot, and I vill adverdise id. I am sure more beoble vill come to see you shump as vill come to hear you sing."

A JOCULAR BOOMERANG

Composers are not always keen to tell stories at their own expense or at that of their compositions, but the following related by Leoncavallo, the prominent composer of the modern Italian school, he deemed too good to keep, though at the time it put him in the light of a first-class plagiarist.

Being one day in the town of Forli, he heard that his opera "I Pagliacci," that work which has given him so much fame, was to be produced, and he decided to hear it incognito. That the composer was in town, was not generally known.

At the opera his seat was beside a bright-eyed and enthusiastic young lady, who, when she saw that the composer did not join in the general applause, but remained quiet, turned to him with the question:

"Why do you not applaud? Does it not suit you?"

The composer, much amused, replied: "No, on the contrary, it displeases me. It is the work of a mere beginner, not to call him anything worse."

"Then you are ignorant of music," she said.

"Oh, no," replied the composer.

Then he proceeded to enlighten her on the subject, proving the music worthless and entirely without originality.

"See," said he, "this motive is ——," and he hummed lightly a short melody; "this aria is stolen from Bizet, and that is from Beethoven." In short, he tore the whole opera into pieces.

His neighbor sat in silence, but with an air of pity on her countenance. At the close, she turned to him and said: "Is what you have said to me your honest opinion?"

"Entirely so," was the reply.

"Good," said she, and with a malicious gleam in her eyes left the theater.

Next morning, glancing over the paper, his eye fell upon the heading, "Leoncavallo on his 'Pagliacci'"; and reading further, he was rather startled to find the conversation of the evening before fully reported and accredited to the proper source. He had, unfortunately, played his little joke on a lady reporter, who had proved too smart for him.

Leoncavallo swore off from making disparaging remarks concerning his own works to vivacious young ladies, no matter how handsome or how enthusiastic they might be.

SCHUBERT'S "SERENADE"

Franz Schubert, like Beethoven, was accustomed to carry with him a note-book in which he could jot down musical ideas as they happened to occur to him. Wherever he happened to be, in the city or the fields, in the tavern or the beer-garden, did a valuable idea occur to him, out came the note-book and it was hastily scratched down for further treatment. When he was seized by an idea it must go down on the first scrap of paper that came to hand. This was the manner in which that beautiful and well-known "Ständchen" first appeared, though it is also told of "Hark! hark! the Lark."

One Sunday, during the summer of 1826, Schubert, with several friends, was strolling about among the suburban villages in the vicinity of Vienna. As was their custom, they stopped at a beer-garden where they sat chatting and enjoying the good company they found. Schubert picked up a book of poetry one of his acquaintances had laid down, and, after turning over the leaves, suddenly stopped, and pointing out a poem exclaimed: "Such a delicious melody has just come into my head; if I but had a sheet of music-paper with me!"

One of his companions hastily drew a few staves on the back of a bill of fare and passed it to him, and in the midst of the hubbub of a German beer-garden Schubert wrote out that beautiful melody that has pleased such a multitude of music-lovers since his day.

MERCY TWICE BLEST

As an illustration of Madame Malibran's kind-heartedness we may cite the following incident: Only about a year before her death she was engaged by an Italian professor to sing at a concert he was giving, and at her regular terms of twenty guineas. For some reason her concert was a financial failure. The teacher called on her the next day to explain this, and to see if Malibran would be content with a smaller sum. But no, she declared she must have the full amount.

The Italian slowly counted out twenty pounds and then looked up and asked if that would do.

"No, another sovereign," she said. "My terms are twenty guineas, not pounds."

So he put down another pound, sighing to himself as he did so, "My poor wife and children." Then Malibran took up the money and pretended to depart, but turned around and put it all back in the hands of the astonished professor, saying:

"I insisted on having the full amount that the sum might be all the larger for your acceptance."

BERLIOZ AND THE CRITICS

It is very easy to criticize, especially to make adverse criticism. A critic may tear to tatters in ten minutes a composition which represents a composer's best thought for ten years. Many of the so-called musical critics have not a tithe of the learning or natural ability of the men whose works they deride. This being the state of affairs, it behooves a composer to be able to defend himself with his pen as well as with the music-score.

A few of the greater lights have been quite able to take their own part in an argument. Berlioz and Wagner were especially given to polemics. Berlioz was particularly caustic in his writings, and Wagner was well able to defend his position in the musical and even in the political world. It is not often that we find a great composer and a prominent critic and musical writer in the same person. But Berlioz was a critic and liked to make fun of the lesser critics, as a big fish would worry the smaller fry.

One of his plans to prove the incompetence of his brother critics was, to say the least, original. He wrote a work of much value and interest, called "The Flight into Egypt," and put it on a programme as the work of one "Pierre Ducre," who was stated to have lived in the seventeenth century. The composition was, of course, in the antique style of that day. The critics gave glowing articles concerning the valuable work Berlioz had unearthed, and went so far as to give historical details of the life of the composer and to speak of hunting up more works from his pen. When the admiration was at its height, Berlioz stepped in and claimed the work as his own composition and showed such a person as Ducre to have existed only in imagination.

The critics could then hardly withdraw their unanimous approbation. So Berlioz had his work favorably criticized and brought prominently before the public, getting a share of public attention that it would not have received but for its supposed antiquity.

HOW HE PLAYED SECOND FIDDLE

The following story places Paganini in a better light than this musical miser was accustomed to appear. And really one is led to wonder which is the true Paganini—the miser or the kind artist giving his talent to assist a poor servant-girl. One morning the maid who waited on him in Paris came to him, weeping, and told how her lover had been conscripted and sent away to the war, and she, of course, was too poor to buy a substitute for him.

Paganini resolved to aid the girl and took a unique way to do it. He procured a wooden shoe and so fashioned it that it could be strung up and played like a fiddle. Then he advertised that he would give a concert and play five pieces on the violin and five on a wooden shoe. Of course, this strange announcement drew a good house. The violinist had given the girl tickets to the concert, and after it was over he went to her, and pouring twenty thousand francs into her lap, he told her that she could now purchase a substitute for her sweetheart and with the remainder set up housekeeping. He also gave her the wooden shoe that had brought her such good fortune and told her to sell it. Of course, this curious instrument brought her a goodly sum, which she added to the amount that was to bring her domestic happiness.

HAT IN HAND

That huge basso of stentorian voice, Lablache, was "a fellow of infinite jest" as well as occasionally one of poor memory. This was once shown in a laughable way, the occasion being his reception by the King of Naples. As Lablache was seated in the reception-room awaiting his turn to pass into the King's presence, he noticed a draught from the open doors and begged to be allowed to keep his hat on to ward off any evil effects.

A few moments later his turn came for admittance, and as the usher beckoned him he hastily caught up a hat that was lying close by, and forgetting that his own hat was on his head, carried the borrowed one with him into the King's presence. His Majesty greeted him with a hearty laugh, which soon brought Lablache to a realization of his ludicrous appearance at a royal reception. But not chagrined by the matter, he brought his ready wit to bear, and bowing to the King declared:

"Sire, your Majesty is quite right; even one hat would be too much for a fellow who has lost his head!"

NATURE'S INSPIRATION

Many a composer has been indebted to some sound or tone in nature for the suggestion of musical ideas. Nature suggests and man elaborates the melody, though some writers would have us believe that the composer is simply the amanuensis of nature, in many cases. But we must remember that music is art, and that nature supplies nature, not art.

A good composer will turn to account a suggestion from any source, however humble. Mendelssohn took pleasure in acknowledging his debt to nature in these matters. While Mendelssohn was not a Beethoven,

while he could not so well depict the rugged, the grand, the heroic, as did that musical Jupiter, yet Mendelssohn was the tone-poet of the forest and field, the bright sun, and the blue sky.

A friend of his relates how they were walking in the country one day, and getting tired, threw themselves on the grass in the shade and were there pursuing their conversation. Suddenly Mendelssohn seized him by the arm and whispered, "Hush!" A moment later the composer told him that a large fly had just then gone buzzing by and he wished to hear its sound die away in the distance.

Mendelssohn was at that time working on his overture to "A Midsummer Night's Dream," and not long after it was completed. He then showed his friend a certain descending bass modulation with the remark, "There, that's the fly that buzzed past us at Schönhausen."

A SHAKER

Queen Victoria was in her day an excellent pianist, and possessed of a remarkably correct ear. Baroness Bloomfield, in her "Reminiscences," relates how on one occasion the Queen asked her to sing, and she, with fear and trembling, sang one of Grisi's famous airs, but omitted the shake, or, as we should say in this country, the trill, at the end. The Queen's quick ear immediately detected the omission, and smilingly her Majesty said to Lady Normanby, the singer's sister: "Does not your sister shake?" To which that lady promptly replied: "Oh, yes, ma'am; she is shaking all over."

PRAISE INDEED!

When in London, Haydn once visited the studio of that celebrated portrait painter, Sir Joshua Reynolds. He there saw a picture of Mrs. Billington, one of the best known singers of her day. Reynolds had represented her listening to the song of the angels. On being asked for his opinion of the painting, Haydn remarked: "Yes, it is a beautiful picture; it is just like her; but there is one strange mistake."

"A mistake! How is that?" exclaimed Reynolds, who could hardly believe his ears.

"Why," said the gallant composer, "you have made Mrs. Billington listening to the angels, when you ought to have painted the angels as listening to her!"

BETTERING THE INSTRUCTION

A peripatetic pianist was grinding out the inevitable "Intermezzo" beneath Mascagni's window one morning, and was giving it at such a rapid tempo that the composer could no longer stand quietly and hear his composition murdered. Rushing into the street, he seized the handle of the instrument and turned it at the proper pace, explaining to the astonished organ-grinder that he had composed the piece, and would like to show him how it should be given. The man was angry at first, but when he realized the honor he had received by having a lesson from Mascagni himself, he evidently conceived an idea—he broke into a broad grin. The next morning he appeared before the composer's house with a huge placard in front of his organ, inscribed "Pupil of the celebrated Mascagni."

A CLERICAL RETORT

Good old Father Taylor, when pastor of the Seamen's Bethel, in Boston, was once preaching on "social amusements." As it happened, but unknown to the speaker, Jenny Lind, who was then singing in America, was in his congregation. He roundly denounced card-playing, dancing, the theater, etc., but in speaking of music gave it his unqualified approval. After dwelling on the power of music in the religious service, he paid tribute to the generosity of the great vocalists, especially to "that greatest and sweetest of them all, now lighted on our shores."

At this point he was interrupted by a boor seated on the pulpit stairs, who shouted out to know if any one who died at Jenny Lind's concert would go to heaven. Taylor's prompt reply was:

"A Christian will go to heaven wherever he dies, but a fool will be a fool wherever he is—even if he is on the steps of a pulpit."

"ALL'S WELL THAT ——"

There are few, if any, walks of life in which men, and women too, are not called upon at some moment or another to exercise what we might almost term a God-given power of independent action, quite over and above their normal round of routine method. There are moments when we are summoned to exercise our own judgment, and are, as it is said, "put upon our mettle." Such moments are precious opportunities in the lives of every one, inasmuch as the proper use of them is often the making or marring of a lifelong career; and such opportunities rightly tackled are sure steps to success.

The late Sir Arthur Sullivan, in the struggling years of his career, once showed great presence of mind, which saved the entire breakdown of a performance of "Faust." In the midst of the church scene, the wire connecting the pedal under Costa's foot with the metronome stick at the organ broke. Costa was the conductor. In the concerted music this meant disaster, as the organist could hear nothing but his own instrument. Quick as thought, while he was playing the introductory solo, Sullivan called a stage hand. "Go," he said, "and tell Mr. Costa that the wire is broken, and that *he is to keep his ears open and follow me.*" No sooner had the man flown to deliver his message than the full meaning of the words flashed upon Sullivan. What would Costa, autocratic, severe, and quick to take offense, say to such a message delivered by a stage-hand? The scene, however, proceeded successfully, and at the end Sullivan went, nervously enough, to tender his apologies to his chief. Costa, implacable as he was, had a strong sense of justice, and the great conductor never forgot the signal service his young friend had rendered him by preventing a horrible fiasco.

CAUGHT IN HIS OWN TRAP

Hummel was one of the most prominent European pianists of the early part of the last century. But he was a very plain and ill-favored sort of a fellow, throwing even Schubert into the shade in this respect. In 1822 Hummel went to Russia, in the suite of the grand duchess, and there his reception was one of the

most flattering and brilliant kind. But there was one thing that marred that cordial reception at Moscow, and that was that the greatest composer and pianist of all Russia did not call on him. This personage was no less than John Field, the Russianized Irishman, the pupil of Clementi.

Finally, Hummel concluded that if the mountain would not come to Mahomet, Mahomet would go to the mountain, and he started out to find Field. When he arrived at Field's rooms he found him giving a lesson and was compelled to await his pleasure. Hummel, with his thick-set body and plain features, and poorly dressed, looked like some German farmer. Field, on the other hand, was elegant in bearing and courtly in manner.

At the close of the lesson, Field turned to his visitor with a gruff "Well, sir, what can I do for you?"

"I have heard so much of your playing that, as I was in Moscow on business, I thought I would come in and make your acquaintance, and hear some of it myself. I am very fond of music and understand it a little."

Field smiled at this request, coming, as it seemed, from some village tradesman who dabbled in music; but he sat down to the piano and played some of his own elegant compositions in his best style. The stranger warmly applauded and thanked him. Then Field, thinking to have some fun, asked the supposed rustic to take his turn at the piano; but Hummel declared he never played without his notes, that he only played a little on the organ now and then, and so on.

But Field insisted, and as his clumsy visitor sat down to the piano, Field leaned back to enjoy the fun. And he did enjoy it, but in a different way from what he expected. Hummel took one of the themes that Field had just finished playing, and developed it into a brilliant fantasia in which were displayed all the intricacies of technique and beauties of expression.

Field was thunderstruck. He sprang to his feet and, catching his visitor by the shoulders, he gave him a shake and then embraced him in the hearty European fashion, crying, "You can't fool me! You are Hummel. No other man in the world can improvise like that!"

With that introduction it is needless to say that the two pianists became fast friends.

SAVED HIS FIDDLE

One of Ole Bull's favorite violins was a Joseph Guarnerius, called the "King Joseph," for the greatest violins of the old makers are known and named as individuals. It is not to be wondered that he was willing to brave a good deal to preserve this violin, for, irrespective of its worth as a producer of beautiful tones, there was some four thousand dollars invested in it.

On one of the great violinist's concert trips in this country, he was a passenger on an Ohio river steamboat. In the fashion of those days the boiler burst, tearing away the forepart of the boat and setting the cabins on fire. Ole Bull found himself choking, deafened, blinded, in the midst of shrieking women and howling children, and surrounded by smoke, flame, and shattered timbers. Did he turn his attention to saving the mothers and little ones? The action of the man was characteristic.

Oblivious to all else, he rushed to his cabin, seized his precious Guarnerius, and putting it between his teeth leaped over the guards into the muddy water and swam to shore. There he tenderly examined his precious fiddle to see that it was not harmed. Ole Bull was nothing to Ole Bull at that moment. His beloved instrument occupied his mind to the exclusion of all else. The only "King Joseph Guarnerius" might have been lost!

PREOCCUPATION

In the history of absent-minded and forgetful men (that remains to be written) Beethoven must certainly have a prominent place.

It is related of him that about the time he was engaged in the "Pastoral" symphony he went into a restaurant and ordered dinner, but as there was some delay in serving the meal, his mind reverted to his composing; and when the waiter came and offered dinner, he waved him away, saying, "Thank you, I have dined," and laying down the price of the meal took his departure.

A friend once presented Beethoven with a noble steed and he took a ride around town. After riding it a few times, he proceeded to forget its very existence, and made his journeys on foot or in coach. But he had a servant who was not so neglectful of his opportunity. This man took the horse under his care and used it as his own, after finding that Beethoven no longer inquired for it. He put it up at a stable and carefully paid the bills, lest his master should be reminded of its existence. Then, to reimburse himself for his trouble and expense, he frequently hired the horse out as he had opportunity and pocketed the proceeds.

THE TEACHER TAUGHT

The technique of the schools that had preceded Chopin was inadequate to the performance of his compositions, so much so that even as great a player as Moscheles confessed himself unequal to the task of properly playing Chopin's music.

It is related that Chopin went to Kalkbrenner, a celebrated pianist and teacher of Paris, hoping to get some valuable technical instruction from a man of such celebrity. Kalkbrenner criticized his playing severely and advised Chopin to attend his classes in the Conservatoire to learn the proper fingering. Chopin answered this advice by placing one of his own études on the piano and asking Kalkbrenner to play it. But the arrogant old fellow was utterly unable to do it, for he found his old style of technique inadequate to the demands made upon it by the music of the younger composer.

SPOHR AS A HORN-PLAYER

Besides being a violinist and composer of note, Spohr was a man of much resource, and had a goodly fund of humor. He tells us that in 1808, when Napoleon entertained various sovereigns of Europe at Erfurt, there were announced to be given before these potentates some of the great French tragedies, by actors brought from Paris for the occasion, prominent among whom was the great Talma. Spohr and some of his pupils took a pedestrian trip from Gotha to Erfurt, more in the hope of seeing this celebrated French tragedian than the assembled sovereigns.

On their arrival they found, much to their chagrin, that the common people were not to be admitted to the theater, as every seat was reserved for the royal personages and their suites. This was a dilemma, but Spohr was equal to it. He had come there to see Talma, and see him he did. He sought out four musicians of the theater orchestra and bribed them to allow himself and his pupils to take their places in the theater. But even then he was met by another obstacle. Three of these musicians were violin or cello players. So far as they were concerned all was well, for Spohr's pupils could play those instruments. But the fourth was a horn-player; and here came the trouble, for none of the four visitors could play that instrument.

There was nothing for it but Spohr must learn to play the horn; so he set about it, practised all day, and by evening was ready to play his part. At the theater they were placed with their backs toward their royal audience, and forbidden to look around to satisfy their curiosity concerning the rulers of the earth. But Spohr was also equal to this emergency, for he had provided himself with a small mirror, and by this means was able to see at least the reflections of the sovereigns of Europe. But he finally became so absorbed in the magnificent acting of the tragic artists that he handed over the mirror to his pupils and gave his entire attention to the stage.

The severe practice that he had been through in learning to play the horn at such short notice, resulted in a pair of swollen and painful lips. On his return to Gotha, when his young wife expressed surprise and alarm at his negro-like appearance, he coolly told her that his lips had come to that condition by the frequent kissing of the pretty Erfurt women. But when the truth came out the joke was on him.

IN BÜLOW'S CLASS-ROOM

Hans von Bülow, the famous pianist and teacher, was even more severe with his pupils than Liszt. Tears were not infrequent in Liszt's class-room, and yet his gallantry and winning personality did much to dull the sharpness of his cutting criticism.

Not so with Bülow. His classes were large, and he called out whom he chose to play what they had prepared. The rest sat trembling in expectation of their turn. An awkward English girl once went to the piano and, because of her great fright, managed to play her piece with so large an assortment of blunders that the irate Doctor cried out: "*Ach, Gott!* you play the easy passages with a difficulty that is simply enormous!" This saying might well be kept as a stock quotation with every teacher, so frequently is it applicable.

HANDEL'S DUEL

Not many of the great composers have gone down in history as having taken part as one of the principals in a duel. Among them, perhaps this honor must be awarded solely to Handel. The cause of this affair was to be found in one of the curious customs of his day.

It was the custom for the director of an opera to play the accompaniments on a harpsichord which had its place on the stage. Distinguished personages who were present often claimed a seat on the stage and felt free to interpose a running fire of audible conversation and comment. This is now relegated to that part of the audience who have little musical understanding and less of good manners.

In the early part of Handel's career he was associated with a composer named Matheson, a man of talent, but of no great depth, but from whose writings we may catch some enjoyable glimpse of the customs of his time. On the occasion in question, in Matheson's opera of "Cleopatra," the composer was acting the part of Antony, and Handel was seated at the harpsichord. When Antony died, early in the opera, Matheson came into the orchestra and desired to take Handel's seat as director. There was some excuse for this wish, as Matheson had been the regular director of the opera.

But Handel, with that irritability which characterized him later in life, crustily refused to give up his place, whereupon a violent quarrel ensued, and as they were leaving the theater Matheson gave him a hearty slap in the face. Handel drew his sword, Matheson defended himself, and a duel was fought then and there. Luckily, perhaps, for musical literature, Matheson's sword was broken against a metal button on his opponent's coat, and the honor of each was vindicated! Soon after, the two composers were at peace and hearty good friends again. This was a good example of a discord, prepared and resolved.

DISQUALIFIED

Dr. Arne was once placed in a somewhat similar situation to that of Solomon when the two women each claimed the child. His disposition of the case was as fair as that of the King, only the distribution was more even, as even as Solomon threatened to make the division of the child in question.

He had been called upon to decide on the merits of two singers. Their merits, by the way, were based largely on their own appreciation of their powers, rather than on that of other people. After hearing them, Dr. Arne cried out to one of them:

"You are the worst singer I ever heard in my life!"

"Then," exclaimed the other, "I win."

"No," answered the just judge, "you can't sing *at all!*"

"SILENCE WHERE NO SOUND MAY BE"

Grétry, the French opera composer, was a man of considerable wit and enjoyed a good joke. He was able to take a hand in a bit of fun when occasion offered. At one time, when going on a trip through Switzerland, he met with a German baron who proposed that they should travel together.

As soon as they had begun their journey, Grétry began a conversation with his lordship, saying, "Ah, sir, how enchanted I am with—"

"Sir," interrupted the baron, "I never talk in a carriage."

"Very well," said Grétry, and subsided into quiet.

The baron had evidently considered that he had a garrulous traveling companion, and that it was best to shut him up in the beginning of the journey.

That night when they halted at an inn and had divested themselves of their dusty traveling robes and were comfortably settled before a roaring blaze, the baron turned to Grétry, saying:

"Now, my dear sir, how glad I am that—"

"Sir," said Grétry sharply, "I never talk in an inn."

The nobleman saw the joke, and the two then entered into friendly conversation.

The next day they were ascending Mount Cenis. Grétry espied a small cross stuck in the ground and inquired of the guides what it meant. He was answered sharply with one word, "Silence!"

"How now," thought our Frenchman, "are these some more German barons?"

But he kept quiet until the end of their climb, when the guides told him that any conversation or noise might, by the vibration of the air, loosen some of the masses of snow and cause an avalanche.

THE "DEAR SAXON"

An interesting story is told of one of Handel's experiences when he was in Italy. The Italians so enjoyed his wonderful powers of playing that they gave him the title of "the dear Saxon." He entered in a friendly rivalry with Scarlatti, in Venice, and after many trials of skill the general verdict was that the Italian excelled on the harpsichord, but the German carried away the palm on the organ.

Some time afterward Handel was invited to a masked ball, and in the course of the evening he sat down at the harpsichord, and astonished all those present by his masterly improvisations. Presently Scarlatti came in, also *en masque*. Walking quickly to the instrument he listened a moment, and then called out, "It is either the devil or the Saxon!"

Handel achieved this enviable reputation when only twenty-one years of age.

ACCENT

The matters called "time" and "accent" in music are stumbling-blocks for many a pupil and for many people who profess to understand the tone-art. If music-students have trouble in understanding these subjects, it is small wonder that so stupid a body as the average court jury should need a detailed explanation of these somewhat common technical terms; and it would need a musician who not only understood his subject, but one who was able to express his ideas in clear, terse language, and to employ apt illustration, to elucidate the matter.

Such a musician was found, when, in 1833, there came up for trial before an English court a case of violation of copyright, and Cooke, the composer, was called as an expert witness. In the course of the examination the following dialogue took place:

"Now, sir," said the lawyer, "you say that these two melodies are identical but different; what am I to understand by that, sir?"

"What I said," replied Cooke, "was that the notes in the two arrangements are the same, but with a different accent, one being in common, the other in triple, time; consequently the position of the accented notes is different in the two copies."

"What is musical accent?" glibly inquired the counsel.

"My terms for teaching music are a guinea a lesson," said Cooke, much to the enjoyment of the spectators.

"I don't want to know your terms for teaching; I want you to explain to his lordship the Judge and to the jury what is 'musical accent.'" Here Sir James Scarlett, the questioner, grew warm and inquired:

"Can you see it?"

"No."

"Can you feel it?"

"Well," drawled Cooke, "a musician can."

Again the lawyer put the question and the court required it to be answered.

"Will you explain to his lordship and the jury, who are supposed to know nothing about music, the meaning of what you call accent?"

"Musical accent," replied the witness, "is emphasis laid on a certain note, just in the same manner as you would lay stress on any word when speaking, in order to make yourself better understood. Let me give you an illustration, Sir James. If I were to say, 'You are a *jackass,*' the accent rests on jackass; but if instead I said, '*You* are a jackass,' it rests on you, Sir James; and I have no doubt the gentlemen of the jury will corroborate me."

WEBER TO A BAWLING CHORUS

Appropriateness of expression is a thing foreign to many choir singers and choristers. Many cultivate the fortissimo habit until all hopes for a pianissimo or even a piano passage vanish. Outside of the excellent effect of an occasional change from a strong, lusty tone to a subdued and quieter passage, there is another matter to be considered, that of suiting the sound to the sense—the volume of tone to the sentiment expressed by the words.

A chorus was once heartily rebuked by Weber in a manner that no doubt left a permanent impression. He was conducting a rehearsal of his "Jubel Cantata" in London. In the course of this work occurs a beautiful prayer for chorus. The singers attacked it with a loud and lusty tone, in a "hammer-and-tongs" style, when suddenly Weber called a halt, saying:

"Stop! do not sing like that. Would you bawl in that manner in the presence of God?"—words that might appropriately be framed in almost every choir-loft.

Not only in chorus and choir, but especially in church and Sunday-school do we find people singing prayerful words in a manner which cannot be better described than in Weber's language—"bawling in the presence of God."

AN INTERRUPTED OPERA

Mozart once created quite a sensation in a theater he was visiting. It was at Marseilles. He had gone to the opera incognito to hear one of his own works performed. All went well till, in a certain passage, through some error of the copyist, the orchestra played "D" where Mozart had written "D sharp." This change of one note made a decided difference in the harmony, and turned the superior harmonic effect intended into something very ordinary.

No sooner was this done than Mozart sprang to his feet, crying out: "Play D sharp, will you; play D sharp, you wretches!" It may be imagined that such actions produced quite a sensation. The orchestra and singers stopped their performance and the audience began to hiss him down and cry, "Put him out!" and he

was about to be summarily ejected from the theater, when he announced who he was.

When it was known that it was Mozart, the tumult subsided, and cries of "Mozart! Mozart!" rang through the house. The very ones that were about to expel him now conducted him to the orchestra, and he was compelled to direct the opera, which was taken up anew. This time the missing D sharp was played in its proper place and produced the intended effect. At the close of the opera a perfect ovation was tendered the composer, and the people were not content until they had escorted him in triumph to his hotel.

"IL TROVATORE"

If the following story of Verdi is true, it speaks better for his discernment as to the popular musical taste than it does for his care for the artistic standard of his works. But it probably should be taken *cum grano salis*.

It is related that when Verdi was putting the finishing touches to his "Il Trovatore" he was one day visited by a friend, an able and conscientious musical critic. Verdi played him several portions of the work and asked him his opinion of them. First came the "Anvil Chorus." "What do you think of that?" asked the composer.

"Trash!" laconically answered the critic.

Verdi chuckled to himself and said, "Now look at this, and this, and this," at the same time showing other numbers.

"Rubbish!" came the answer.

Verdi showed his delight at these answers to such a degree that his friend demanded to know what he meant by such conduct, when the master replied:

"My dear friend, I have been composing a popular opera. In it I resolved to please everybody save the great critics and classicists like you. Had I pleased them I should have pleased no one else. What you say assures me of success. In three months 'Il Trovatore' will be sung, and roared, and whistled, and barrel-organed all over Italy."

And such proved to be the case.

SAVED

The favorite compositions of the public are frequently not the favorite ones of their composers. And very frequent is it that works to which the composer has given the most time, labor, and thought find less favor in the eyes of the public than others which are not so satisfactory to the writers.

An example of this is seen in Beethoven's well-known song "Adelaïde." Just as he finished writing this song a friend of his, a Herr Barth, called on him and found him with the manuscript, still wet from the pen, in his hands.

"Here," said Beethoven, holding out the score to his visitor, "look at that; I have just written it and don't like it. There is hardly enough fire in the stove to burn it, but I will try," and he was about to commit it to the flames, when Barth got his permission to try the song. Barth sang it, and liking it very much, persuaded Beethoven not to destroy it. "Adelaïde" is now perhaps the best known of all Beethoven's songs.

BRIGNOLI'S ENGLISH

Not every singer, even though he be able to excite the plaudits of thousands by his song-language, can succeed in making a hit by spoken language. The well-known singer Brignoli seemed to be successful in both lines, as witness the following. It became necessary, one evening, for some one to apologize for the non-appearance of the prima donna, as she was suffering from a sore throat. The manager sent Brignoli before the curtain to make the necessary excuses. So the tenor went forward and said:

"Ladies and gentlemen, I regret to zay zat Madame N—— ees a leetle hoarse zees evening."

Peals of laughter greeted this announcement; the tenor looked puzzled, and, thinking the people had misunderstood him, he roared out:

"I zay zat Madame N—— ees a leetle hoarse zees evening!"

This was greeted by another explosion of mirth; then, to cap this lucid explanation, some one in the gallery roared out, "Then if she is a little horse why not trot her out?" That explained to the puzzled tenor the cause of the laughter and he was then able to join in the fun.

THIS TOO TOO SOLID FLESH

The great basso Lablache, besides being a very tall man, was remarkably large and heavy. In fact, he was so large that, when living in London, he had a cab of extraordinary size built for his use, as the ordinary "growler" persisted in breaking down under his weight; and it was considerably more trouble to get out from a wrecked vehicle than it was to get into it. It is told that when he was one time singing in Havana, as he was riding along the street in a cab, the bottom of the carriage was crushed through by his heavy weight, letting his feet down on the ground. The cabman knew nothing of the accident but continued to drive on, serenely unconscious of his employer's plight. So there was nothing for the elephantine basso to do but to run along, keeping up with the cabby's pace, all the while calling to the driver to stop. Those who saw Lablache's plight had a hearty laugh at the spectacle of those fat legs sticking out from under the cab.

At another time he was cast in an opera for the part of a prisoner who had wasted away by years of incarceration in the dungeon. When this mountain of flesh came walking down the stage singing, "I am starving," the whole house broke into a roar of laughter, and the obese basso had to make an ignominious exit, followed by the shouts of the audience.

OFFERED HER HIS SEAT

The public performer is frequently pestered for complimentary tickets to his concerts or recitals. Often some chance acquaintance, or even total stranger, unblushingly proffers his request for complimentaries.

Not every artist can keep his good humor under such provocation, or come out of the ordeal as neatly as did Rubinstein when once a woman rushed up to him and said:

"Oh, Mr. Rubinstein, I am so glad to meet you; all of the tickets are sold and I have tried in vain to pur-

chase a seat to your recital. Have you not a seat you could let me take?"

"Madame," replied the great artist, "there is but one seat at my disposal, but you are welcome to that if you will take it."

"Oh, thank you, a thousand thanks, Mr. Rubinstein. Where is it?"

"At the piano," was the smiling reply.

NOT THE GEESE THAT SAVED ROME

Bülow was a master of satire and irony, as the orchestras and choruses which came under his direction could well testify.

On one occasion he rebuked the feminine half of an oratorio chorus which he was rehearsing. While the tenors and basses were singing their parts the sopranos and altos indulged in conversation. They were called to order several times, but paid no attention. Finally Bülow rapped upon his desk and called out, "Ladies, Rome does not have to be saved to-night," and the "cackling" ceased.

RICHARD WAGNER AND THE NUMBER 13

If the number 13 is, as many people believe, an unlucky one, certainly the life of Richard Wagner should have been full of ill-luck; for this cabalistic set of figures turns up at all times and places in his biography. While Wagner had, during some periods of his life, a hard battle with the non-appreciation of his fellow-musicians, we would hardly like to believe, after reading the last thirty years of his biography, that his life was an utter failure! So perhaps there is not so much bad fortune in the number 13 as the superstitious would have us believe. But the recurrence of this number so frequently is a peculiar coincidence. A statistically inclined writer has made the following list:

Wagner was born in 1813 and died on the 13th of the month; there are 13 letters in his name, and the sum of the figures in 1813 equals 13. The full date of his death was the 13th day of the second month in '83; it makes 13 twice—viz., first 13, and again 2+8+3=13. He composed 13 operas or music-dramas. His first and determining impression in favor of a dramatic career was formed on the 13th of the month. He was influenced in his choice emphatically by hearing Weber's "Freischütz," and by Wilhelmine Shröder-Devrient. The latter went upon the stage on the 13th of October, 1819, and the "Freischütz" was completed on May 13, 1820, and first performed in Dresden, Wagner's home, in 1822 (1+8+2+2=13). Weber died in Wagner's 13th year. Wagner's first public appearance as a musical personage dates from the year 1831 (1+8+3+1=13), he being at this time a music-student in the Leipzig University.

The stage at Riga, where he became a director, was opened on the 13th day of September, 1837, and he there began the composition of "Rienzi," which he completed in Paris in 1840 (1+8+4=13). On the 13th of April, 1844, he completed his "Tannhäuser," and it was performed in Paris on March 13, 1861, and on the 13th of August, 1876, he began the first presentation of his "Bayreuth dramas," the "Nibelungen Ring."

Wagner was exiled from Saxony for 13 years. The 13th of September, 1882, was his last day at Bayreuth before leaving for Venice. Wagner saw Liszt for the last time in Venice on January 13, 1883, and finally he died on the 13th of February, in the 13th year of the new German confederation.

A LITTLE TRICK OF PAGANINI'S

The most brilliant period of Paganini's life was from 1814 to 1818. He was in high favor in Italy and was then more free with his talent than later in life. He was poor at that time and was largely occupied with gambling and with falling in love, but at the same time he was prodigal with his music, whether it be in the palatial dwellings of the aristocracy or on the streets.

Together with an excellent guitar-player named Lea, he would wander all night long playing under the windows of their friends and improvising the most fascinating duets. Then when tired they would drop into the nearest inn and refresh themselves in a way not unheard of by many other musicians.

One evening a rich gentleman begged the pair, Paganini and Lea, together with a cellist named Zeffrini, to serenade his lady-love. They consented. Before beginning to play, Paganini quietly tied an open penknife to his right arm. Then they commenced. Soon the E string snapped.

"That is owing to the damp air," said the violinist, and kept on playing on the other three strings.

A few moments later the A broke and Paganini exclaimed, "Just see what the dampness is doing this evening!" But he went on playing. Finally the D snapped, and the love-sick swain began to be fearful for the success of his serenade. For what could Paganini do with only one string on his violin! But Paganini simply smiled and went on with the music with the same facility and strength of tone that he had previously used on all four cords. The penknife was more to blame than the dampness of the air.

PRONOUNCING DICTIONARY OF MUSICAL TERMS

DIRECTIONS FOR PRONUNCIATION

All Italian, French, and German words are written out phonetically, on the following system:

A as in *far*, represented by *ah*.

The Continental *e* has the sound of *a* in *fare;* it is represented by *eh*.

The Continental *i* has the sound of *e* in *deer;* it is represented by *ee*.

The following vowel sounds have no equivalents in English: French *e*, when not accented, something like the vowel sound in *love*. German *ö* (*o* modified, or *Umlaut*) has nearly the same sound. German *ü* is about half-way between the sound of *o* in *love* and *e* in *deer*. *O* and *u* have the same sound as in English, the *u* sound being represented by *oo*, as in *cool*. Italian *ae* has the sound of long *i* in English. German *ä* is the equivalent of *a* in *air*. German *eu* is sounded like *oi*, as in *toil*.

The following consonantal sounds have no English equivalents: German hard guttural *ach* and soft guttural *ag*. The French sound of *j* is represented by *zh* as nearly as possible. The French nasals *an*, *en*, *in*, *on*, can be represented but very unsatisfactorily in English only by adding a final *g*.

Whenever *ch* is found it is to be sounded like *ch* in *chair*. *C* always has this sound in Italian when followed by *i* or *e*. The Italian *ch*, on the contrary, always has the sound of *k*, or *c* hard, and is thus represented. The Italian *zz* has the sound of *ts* or *ds*, and is thus represented.

With this explanation of the phonetic system adopted to represent the foreign sounds, it is believed that the reader will find no difficulty in acquiring their proper pronunciation.

A PRONOUNCING DICTIONARY OF MUSICAL TERMS

A

A. The 6th of the normal major scale; the 1st of the normal minor scale; the standard by which the orchestra is tuned, given by the oboe.

A, A (It. and Fr.) (*ah*). At, in, by, for, with.

Ab (Ger.). Off. This word is used in organ music to signify the discontinuance of certain stops.

Abacus harmonicus (Lat.). A table of notes; also the arrangement of the keys and pedals of an instrument.

A ballata (It.) (*ah bal-lah'-tah*). In the style of a ballad.

Abandon (Fr.) (*ah-ban'-dong*). Without restraint.

A battuta (It.) (*ah bat-too'-tah*). As beaten; strictly in time.

Abbandonatamente (It.) (*ahb-bahn-do-nah-tah-men'-teh*). Vehemently; violently.

Abbandono (It.) (*ahb-bahn-do'-no*). With passionate expression; with abandon.

Abbellimento (It.) (*ab-bel-lee-men'-to*). Embellishment.

Abbellitura (It.) (*ab-bellee-too'-ra*). Embellishment. Both are derived from—

Abbellire (*abbel-lee'-reh*). To ornament.

Abbreviamenti (It.). Abbreviations in musical notation.

Abbreviation. A system frequently employed in music, by which a portion of a technical term is made to stand for the whole. The following is a list of the abbreviations in most common use; the explanation of each term may be found on reference to the words themselves in their proper places:

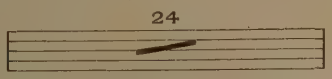
Accel.	Accelerando
Accel°	
Acc.	Accompaniment
Accom.	
Accomp.	
Accres.	Accresciamento
Adg° or ad°	Adagio
Ad l.	Ad libitum
Ad lib.	
Affett°	Affettuoso
Affrett°	Affrettando
Ag°	Agitato
Agit°	
All°	Allegro
Allgtt°	Allegretto
All' ott.	All' ottava
All' 8va	
Al seg.	Al segno
And^no^	Andantino
And^te^	Andante
Anim°	Animato
Arc.	Coll arco, or arcato
Ard°	Ardito
Arp°	Arpeggio
A t.	A tempo
A tem.	
A temp.	
Aug.	By Augmentation
B.	Bass (voice) / Bassoon / Contre bass
B. C.	Basso continuo
Brill.	Brillante
C. B.	Col basso
C. D.	Colla destra
C. S.	Colla sinistra
Cad.	Cadence
Cal.	Calando
Can.	Cantoris
Cant.	Canto
Cantab.	Cantabile
Cello	Violoncello
Cemb.	Cembalo
Ch.	Choir organ
Chal.	Chalameau
Clar.	Clarinet
Clar^tto^	Clarinetto
Clar.	Clarino
Co. so.	Come sopra
Col C.	Col canto
Col ott^a^	Coll' ottava
Col. vo.	Colla voce
Con esp.	Con espressione
Cor.	Cornet or horn
Cres°	Crescendo
Cresc.	
C. S.	Colla sinistra
C. 8va	Coll' ottava
Co 1mo	Canto primo
Co. 1mo	Come primo
C^to^	Concerto
D.	Destra, droite
D. C.	Da capo
Dec.	Decani
Decres.	Decrescendo
Delic.	Delicamente
Dest.	Destra
Diap.	Diapasons
Dim.	By diminution
Dim.	Diminuendo
Div.	Divisi
Dol.	Dolce
Dolcis.	Dolcissimo
Dopp. ped.	Doppio pedale
D. S.	Dal segno
Energ.	Energicamente
Espr.	Espressivo
Espres.	
F. or for	Forte
Fag.	Fagotto
Falset.	Falsetto
Ff. or Fff.	Fortissimo
Fl.	Flauto

F O.	Full Organ
F. Org.	
Forz.	Forzando
Fz.	
G.	Gauche
G. O.	Great Organ
G. Org.	
Gt.	
Gr.	Grand
Grando	Grandioso
Grazo	Grazioso
Hauptw.	Hauptwerk
Hptw.	
H. W.	
Haut.	Hautboy
H. C.	Haute contre
Intro.	Introduction
Inv.	Inversion
L.	Left
Leg.	Legato
Leggo	Leggiero
L. H.	Left Hand
Lo.	Loco
Luo.	Luogo
Lusing.	Lusingando
M.	Manual
Main	
Mano	
Maesto	Maestoso
Magg.	Maggiore
Man.	Manuals
Manc.	Mancando
Mando	
Marc.	Marcato
M. D.	Mano diritta / Main droite / Mano destrâ
M. G.	Main gauche
M. M.	Maelzel's Metronome
M. M. ♩= 92	The beat of a quarter-note is equal to the pulse of the pendulum of the Metronome said to be Maelzel's, with the weight set at 92.
M. P.	Mezzo piano
MS.	Manuscript or Mano sinistra
Men.	Meno
Mez.	Mezzo
Mf. or Mff.	Mezzo forte
Modto	Moderato
Mus. Bac.	Bachelor of Music
Mus. Doc.	Doctor of Music
M. V.	Mezzo voce
Ob.	Oboe, or Hautbois
Obb.	Obbligato
Oberst.	Oberstimme
Oberw.	Oberwerk
Obw.	
Oh. Ped.	Ohne Pedal
Org.	Organ
8va	Ottava
8a	
8va alta	Ottava alta
8va bas.	Ottava bassa
P.	Piano
Ped.	Pedal
Perd.	Perdendosi
P. F.	Piu forte
Piang.	Piangendo
Pianiss.	Pianissimo
Pizz.	Pizzicato
Pmo.	Pianissimo
PP.	
PPP.	Pianississimo
PPPP	
1ma	Prima (volta)
1mo	Primo
4tte	Quartet
5tte	Quintet
Rall.	Rallentando
Raddol.	Raddolcendo
Recit.	Recitative
Rf., rfz., or rinf.	Rinforzando
R. H.	Right Hand
Ritar.	Ritardando
Riten.	Ritenuto
S.	Senza
𝔰	A sign
Scherz.	Scherzando
2da	Seconda (volta)
2do	Secondo
Seg.	Segue
Sem.	Sempre
Semp.	
7tt	Septet
6tt	Sestet
Sfz.	Sforzando
Sinf.	Sinfonia
Smorz.	Smorzando
S. Int.	Senza interruzione
S. S.	Sensa sordini
S. sord.	
Sos.	Sostenuto
Sost	
Spir.	Spiritoso
S. T.	Senza tempo
Stacc.	Staccato
St. Diap.	Stopped Diapason
String.	Stringendo
Sw.	Swell Organ
Sym.	Symphony
T.	Tenor, tutti, tempo, tendre
T. C.	Tre corde
Tem.	Tempo
Tem. 1o	Tempo primo
Ten.	Tenuto
Timb.	Timballes
Timp.	Timpani
Tr.	Trillo
Trem.	Tremolando
3o	Trio
Tromb.	Trombi
Tromb.	Tromboni
T. S.	Tasto solo
U.	Una
U. C.	Una corde
Unis.	Unisoni
V.	Voce
V.	Volti
Va.	Viola
Var.	Variation

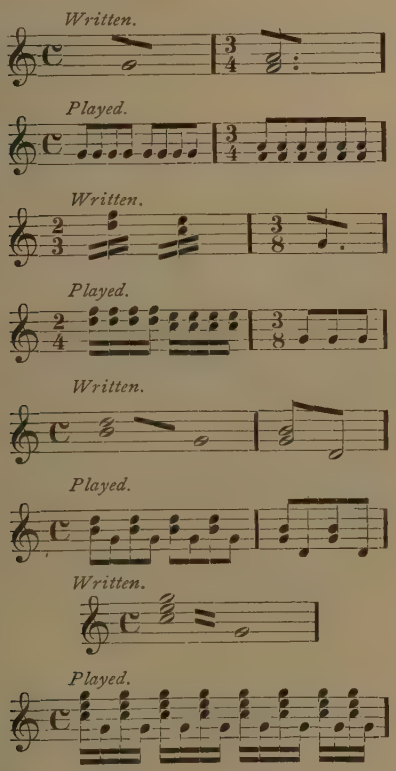
Vcllo	Violoncello
Viv.	Vivace
Vo.	Violino
Vno.	Violino
Violo	Violino
V. S.	Volti subito
Vni	Violini
VV.	Violini

There are other abbreviations employed in manuscript or printed music, the chief of which are as follows:

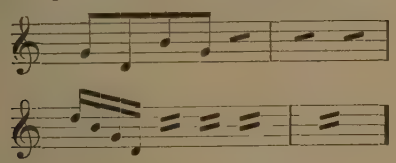
In time, a dash with a figure above signifies the length of the pause in bars, *e.g.*:



In notes, the trouble of writing a passage in full is saved by the use of abbreviations, *e.g.*:



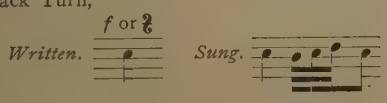
Repetition phrases are thus shortened:



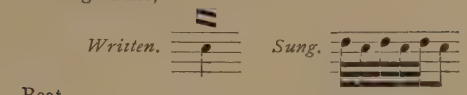
Abbreviations, by signs, of musical graces:

The Turn,

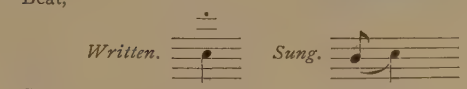
The back Turn,



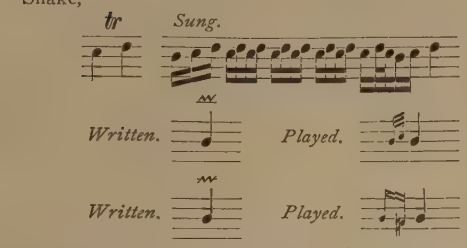
Passing shake,



Beat,



Shake,



Abgestossen (Ger.) (*ap-geh-stoss-en*) [from *abstossen*, to knock off]. Detached; staccato.

Absolute Music. Music independent of words, scenery, acting or "programme."

A capella (*cah-pel'-la*). In church style, *i. e.*, vocal music, unaccompanied.

A capriccio (*cah-pritch'-eo*). Capriciously; without regard to time in performance or to form in construction.

Accelerando (It.) (*at-chel-leh-ran-do*). Hastening the movement (tempo).

Accent. The stress which recurs at regular intervals of time. Its position is indicated by upright strokes called *bars*. The first note inside a bar is always accented. When the bars contain more than one group of notes, which happens in compound time, other accents of lesser force occur on the first note of each group; these are called *secondary* or *subordinate* accents, whilst that just inside the bar is termed the *primary* or *principal* accent. Other accents can be produced at any point by the use of the sign > or *sf*. The throwing of the accent on a normally unaccented portion of the bar is called *syncopation*. A proper grouping of accents will produce rhythm. It is considered a fault if an accented musical note falls on a short syllable.

Acciaccatura (It.) (*at-cheea-ca-too'-ra*). A short grace note, written thus: takes the place in the harmony of the note it precedes; is played rapidly. [From **Acciaccare** (*at-chee-ac-cá-reh*), to crush or jam together.]

Accidentals. All signs for raising or depressing letters that are not found in the signature.

Accolade (Fr.) (*ac-co-lahd*). A brace enclosing two or more staves. { [From Latin *ad*, to; *collum*, the neck.] To embrace.

Accompagnamento (It.) (*ac-com-pan-ya-men-to*), **Accompagnement** (Fr.) (*ac-com-pang-mongt*), **Accompaniment.** The separate part or parts that accompany a solo or chorus; generally instrumental, but a vocal solo with vocal accompaniment is frequently met with.

Accompaniment ad libitum (Lat.). An accompaniment that may be omitted without injury to the musical effect.

Accompanist or Accompanyist. One who plays or sings an accompaniment to a solo.

Accoppiato (It.) (*ac-cop-pee-ah'-to*). Coupled or joined together.

Accord (Fr.). A chord; agreement in pitch. Mode of tuning a string instrument.

Accordatura (It.) (*ac-cor-da-too'-ra*). The mode of tuning string instruments, as violin, guitar, etc.

Accordion. A small, portable instrument with free reeds.

Achtel (Ger.). Eighth-note.

Achtel Pause (*pow-ze*). Eighth-rest.

Acoustics (*a-koos-tics*) [from Greek *akuo,* to hear]. The science of sound; that which treats of the cause, nature, and phenomena of sound as a branch of physical science.

Action. The mechanism by means of which the hammers of the piano and the valves and stops of the organ are controlled by the performer.

Acuta (Lat.). Acute. A mixture-stop in the organ.

Acute. Pitched high; the opposite of grave.

Adagietto (It.) (*a-da-jee-et'-to*). Diminutive of Adagio; not so slow as Adagio.

Adagio (It.) (*a-da'-jee-o*). Slowly; also a name given to a movement written in that time.

Adagio assai (*as-sah-e*), **Adagio di molto** (*dee mol-to*). Very slowly.

Adagio cantabile (*can-tah'-bee-leh*). Very slow and sustained, as if being sung.

Adagio patetico (*pa-teh'-tee-co*). Slow and with pathos.

Adagio pesante (*peh-san'-teh*). Slow and weighty.

Adagio sostenuto (*sos-teh-noo-to*). Slow and sustained.

Adagissimo (It.). Superlative of Adagio. More than usually slow; very slow indeed.

Added Sixth. A name given to the subdominant chord with the 6th over its fundamental added, thus: F A C D. This explanation of this combination is not now generally accepted.

Addolorato (It.) (*ad-do-lo-rah'-to*). Sorrowful; dolorous.

A demi-jeu (*deh-mee-zheoo*). With half force or play. A direction to use half the power of the instrument, generally used of the organ.

A deux cordes (*doo-cord*). On two strings.

A deux mains (*doo-mang*). By or for two hands.

A deux temps (*doo-tahm*). In ⅔ time.

Adirato (It.) (*ad-ee-rah'-to*). Angrily; irritated.

Adjunct Keys or Scales. Those a fifth above and fifth below the given key or scale. Related scales. The scales or keys of the dominant and subdominant.

Adjunct Notes. Short notes, not essential to the harmony, occurring on unaccented parts of a bar. [Cf. *Auxiliary Notes, Passing Notes.*]

Ad libitum (Lat.). At will. (1) In passages so marked, the time may be altered at the will of the performer. (2) Parts in a score that may be omitted.

A dur (Ger.) (*dure*). A major.

Æolian. The name of one of the Greek scales; also of one of the ecclesiastical scales. Identical with modern A minor without sharped seventh.

Æolian Harp. A shallow, oblong box with gut-strings set in motion by the wind, generally made to fit a window with the lower sash raised enough to admit it. The strings should be tuned in unison.

Äussere Stimmen (Ger.) (*ois-eh-reh stimmen*). The outer parts, as soprano and bass in a chorus, or violin and violoncello in a quartet.

Äusserst (Ger.). Very; extremely.

Äusserst rasch (*rash*). Very quick.

Affabile (It.) (*af-fah'-bee-leh*). Pleasing; affably; agreeably.

Affannato (It.) (*af-fah-nah'-to*) [from *affanno,* anxiety]. Distressfully.

Affannosamente (It.) (*af-fah-no-sah-men'-teh*). Restlessly.

Affannoso (It.) (*af-fah-no-so*). Mournfully.

Affettuosamente (It.) (*af-fet-too-o-sa-men-teh*), **Affetuoso** (It.) (*af-fet-too-o-so*). Affectionately.

Affinity. Connected by relation. Relative keys.

Afflitto (It.) (*af-flit'-to*). Sadly; afflictedly.

Affrettando (It.) (*af-fret-tan'-do*), **Affrettate** (It.) (*af-fret-tah'-teh*), **Affrettore** (It.) (*af-fret-to'-reh*). Hastening the time.

Agevole (It.) (*a-jeh'-vo-leh*), **Agevolezza** (It.) (*a-jeh-vo-letz'-ah*). With lightness or agility.

Agilmente (It.) (*a-jil-men'-teh*), **Agilmento** (It.). In a lively, cheerful manner.

Agitamento (It.) (*a-jee-tah-men'-to*). Restlessness.

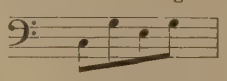
Agitato (It.) (*a-jee-tah'-to*). Agitated. To sing or play in an agitated, hurried manner.

Air. A tune, song, melody.

Ais (Ger.) (*a-iss*). A sharp.

A la. In the manner of, as **a la chasse** (*shass*). Like a hunt; hunting song.

A la mesure (Fr.) (*meh-zoor*). In time. Same as *A tempo* and *A battuta.*

Alberti Bass. Broken chords arranged thus:

So called from the name of its reputed inventor, Domenico Alberti.

Al' loco. At the place. Used after the direction to play 8th higher or lower.

Al piacere. See *A piacere.*

Al rigore di (or **del**) **tempo** (*ree-go-reh dee tempo*). In strict time.

Al scozzese (*scots-zeh-zeh*). In Scotch style.

Al segno (*sen-yo*). To the sign. A direction to return to the sign 𝄋. **D'al segno,** from the sign, is used with the same intention.

All' antico (*an'-tee-ko*). In ancient style.

All' ottava (*ot-tah-vah*). When *over* the notes, play octave higher than written; when *under,* an octave lower. In orchestral scores it means that one instrument is to play in octaves with another.

All' unisono. At unison.

Alla (It.). Written Al. or All. before words beginning with a vowel. Like; in the style of.

Alla breve (It.) (*al-lah breh'-veh*). This was originally 𝅗𝅥 rhythm, so called from the fact that one *breve,* or double-whole-note, filled each measure. To-day the term is more generally applied to 𝅗𝅥 rhythm, marked 𝅵.

Alla caccia (It.) (*cat-chia*). In hunting style.

Alla camera (It.) (*ca'-meh-rah*). In chamber-music style.

Alla capella. In church style. Also *A capella.*

Alla deritta. By degrees.

Alla hanacca (*ha-nak-ka*). In the manner of a hanacca.

Alla marcia (*mar'-chee-a*). In march style.

Alla mente (*men-teh*). Extemporaneous.

Alla militare (*mee-lee-tah-reh*). In military style.

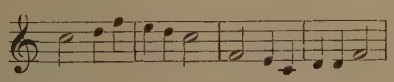
Alla moderno. In modern style.

Alla Palestrina. In the style of Palestrina, *i.e.,* strict C. P. without instrumental accompaniment.

Alla polacca. Like a polacca or polonaise.

Alla quinta. At the fifth.

Alla rovescio (*ro-veh'-shee-o*). By contrary motion or reverse motion, as when a phrase is imitated with the movement of the intervals inverted. Example:



Alla siciliana (*see-chee-lee-ah'-nah*). In the style of a Siciliana, *q. v.*

Alla stretta. Like a stretto, *q. v.*

Alla turca. In Turkish style.

Alla zingaro. In Gypsy style.

Alla zoppa. Lamely; halting.

Allegramente (It.) (*al-leh-grah-men'-teh*). Joyfully.

Allegretto (It.) (*al-leh-gret'-to*). Diminutive of *Allegro.* (1) Slower than Allegro. (2) A movement in this time.

Allegrettino (It.) (*al-leh-gret-tee'-no*). Diminutive of *Allegretto.* (1) Not so fast as Allegretto. (2) A short Allegretto movement.

Allegro (It.) (*al-leh-gro*). (Lit., joyful.) Quick, lively. The word is occasionally employed to describe a whole movement of a quartet, sonata, or symphony. In music it is sometimes qualified as:

Allegro agitato (It.). Quick and in an excited manner.
Allegro assai (It.). Literally, fast enough. A quicker motion than simple allegro.
Allegro commodo or comodo (It.). An easy, graceful allegro.
Allegro con brio (It.). Quickly and with spirit.
Allegro con fuoco (It.). Rapidly and with fire.
Allegro con moto (It.). With sustained joyfulness.
Allegro con spirito (It.). Joyfully and with spirit.
Allegro di bravura (It.). A movement full of executive difficulties intended to exhibit the capacity of the singer or player.
Allegro di molto (It.). Exceedingly quick.
Allegro furioso (It.). Rapidly and with fury.
Allegro giusto (It.). In quick but steady time.
Allegro ma grazioso (It.). Lively and with graceful motion.
Allegro ma non presto (It.). Rapidly, but not too fast.
Allegro ma non tanto (It.). Quickly, but not too much so.
Allegro ma non troppo (It.). Lively, but not too fast.
Allegro moderato (It.). Moderately quick.
Allegro molto (It.). Very quick.
Allegro risoluto (It.). Lively and with firmness and decision.
Allegro veloce (It.). Lively and with speed.
Allegro vivace (It.). Lively and brisk.
Allegro vivo (It.). Quick and lively.

Allemande (Fr.) (*almain, allemaigne*). A German dance (or some authorities say French), originally in duple time. Adopted as one of the movements in the Suite by Bach, Handel, and others, and written in $\frac{4}{4}$ time.

Allentamento (It.) (*al-len-tah-men-to*), **Allentato** (It.) (*al-len-tah-to*), **Allentando** (It.) (*al-len-tan-do*). Giving way; slackening the time.

Allmählig (Ger.) (*all-may-lig*). Gradually; by degrees.

Alpenhorn or **Alphorn.** A wooden horn slightly curved, 4 to 8 feet long, used by the Swiss herdsmen.

Alt (Ger.). The alto voice or part.

Alt-Clarinette. Alto clarionet. Its pitch is a 5th below the ordinary clarionet.

Alt-Geige. The viola.

Alt-Oboe. Oboe de caccia, *q. v.*

Alt-Posaune (*po-zow-neh*). Alto trombone.

Alterato (It.) (*al-teh-rah'-to*), **Altéré** (Fr.) (*al-teh-reh*). Changed; altered.

Altered. Said of intervals, the normal condition of which in a scale or chord is changed.

Alternativo (It.) (*al-ter-nah-tee'-vo*). An alternate. A part of a movement to be played alternately with others. This name is frequently given to the second trio of a Scherzo in chamber music when (as is unusual) a second trio is added.

Altissimo (It.). The highest.

Alto (It.). High, loud. Originally applied to high male voices, now generally to the lowest female voice. Also applied to the viola (or tenor violin).

Alto Clef. The C clef on the third line, used for the viola, alto trombone, and (in Europe) for the alto voice.

Altra, Altre, Altri, Altro (It.) (masculine and feminine forms in the singular and plural). Other, others.

Amabile (It.) (*ah-mah'-bee-leh*). Amiably, sweetly, tenderly.

Amarevole (It.) (*ah-mah-reh'-vo-leh*). Sad, bitter.

Amateur (Fr.) (*a-mah-toor*). A lover of art. Generally applied to one who does not follow it professionally.

Ambrosian Chant. The system of church music introduced by Ambrose of Milan in the fourth century.

Ambrosian Hymn. A name given to the Te Deum on account of the belief—now known to be erroneous—that it was written by Ambrose of Milan.

Âme (Fr.) (*am*). Soul. The French name for the sound-post of instruments of the violin family.

American Organ. The English name for American reed organs, in which the air is drawn through instead of being forced through the reeds, as in the usual European system.

A mezza voce (It.) (*met-za vo-chee*). With half voice.

A moll (Ger.). A soft, *i. e.*, A minor.

Amorevole (It.) (*a-mor-eh'-vol-eh*), **Amorevolmente** (It.), **Amorosamente** (It.), **Amoroso** (It.). Lovingly; tenderly; amorously.

Amusement (Fr.) (*a-mooz-mong*). A light composition; a divertimento.

Anche (Fr.) (*onsh*). A reed of organ-pipe, or mouth-piece of oboe, clarionet, etc. **Jeu-d'anche,** reed-stop. **Ancia** (It.) (*an-chee-ah*). Italian form of the same word.

Anche (It.) (*an-keh*). Also; yet; still.

Anche piu moto. Still or yet faster.

Ancor (It.). Also; yet; still; used in the same way as Anche.

Ancora (It.). Again. Fr., *encore.*

Andächtig (Ger.) (*an-daych-tig*). Devoutly.

Andamento (It.) (*an-da-men'-to*). Movement; the coda to a long fugue theme frequently dropped in the "working out."

Andante (It.) [from *andare,* to walk or go slowly]. A slow movement; quiet, peaceful tempo.

Andante affettuoso. Slow, with tenderness.

Andante cantabile (*can-tah'-bee-leh*). Slow and singing.

Andante con moto. Slow, but with a little motion.

Andante grazioso. Slow and graceful.

Andante maestoso. Slow and majestic.

Andante non troppo or **ma non troppo.** Slow, but not too slow.

Andante pastorale. Slow, in pastoral style.

Andante sostenuto (It.) (*sos-teh-noo'-to*). Slow, with smoothness.

Andantemente (It.). Like an Andante.

Andantino (It.) (*an-dan-tee'-no*). A diminutive of *Andante.* A little faster than Andante (some say slower, but the Italian dictionaries say faster).

Anelantemente (It.) (*ah-neh-lan-teh-men'-teh*). Ardently; eagerly.

Anfang (Ger.). Beginning.

Anfangsgründe (Ger.). Rudiments.

Anfangs-Ritornel (Ger.). Introductory symphony.

Angenehm (Ger.) (*an'-geh-nehm*). Pleasing; agreeable.

Anglaise (Fr.) (*on-glehs*), **Anglico** (It.) (*an'-glee-ko*). The English country dance.

Angel'ica (Lat.). The vox angelica.

Angel'ique (Fr.) (*on-jeh-leek*). Voix angelique, angel voice, name of an organ-stop. Also called Voix Céleste (Fr.) (*vo-a seh-lest*). Celestial voice.

Angosciosamente (It.) (*an-go-shee-o-sa-men'-teh*), **Angosciosо** (It.) (*an-go-shee-o'-so*). Painfully; with anguish.

Anhang (Ger.) [*anhängen,* to hang to]. Coda.

Anima (It.) (*ah'-nee-mah*), **Animato** (It.) (*ah-nee-mah'-to*), **Animando** (It.). Soul; spirit; life; lively with animation.

Animosamente (It.) (*ah-nee-mo-sah-men'-teh*), **Animosissimo** (It.) or **Animosissamente.** Very energetic; boldly.

Animoso (It.). Spiritedly; energetically.

Anlage (Ger.) (*an-lah'-geh*). The plan of a composition.

Anleitung (Ger.) (*an-ley'-toong*). Direction; guidance; preface.

Anmuth (Ger.) (*an-moot*). Sweetness; grace; charm.

Anmuthig (Ger.). Sweetly; gracefully.

Ansatz (Ger.). (1) Attack. (2) Position of mouth in singing. (3) Position of lips in blowing a wind instrument. See *Embouchure.*

Anschlag (Ger.). Touch, as applied to piano and other keyed instruments.

Anschwellen (Ger.) (*an-shvel-len*). To increase in loudness; crescendo.

Antecedent [Lat. *ante, cado,* to fall before]. The subject or theme proposed for imitation; the subject of a fugue. The reply or imitation is called the consequent.

Anthem, ***ănthĕme,** ***ăntĕm,** *s.* [In A. S. *antefen,* a hymn sung in alternate parts, an anthem; O. Fr., *anthame, antene, antienne, antevene;* Prov., *antifene, antifona;* Sp. and It., *antifona;* Low Lat., *antiphona;* from Gr. ἀντίφωνον (*antiphōnon*), an antiphon, an anthem; ἀντίφωνος (*antiphōnos*), sounding contrary, . . . responsive to; ἀντί (*anti*), opposite to, contrary to; φωνή (*phōnē*), a sound, a tone.]

*(1) *Originally:* A hymn sung "against" another hymn; in other words, a hymn in alternate parts, the one sung by one side of the choir, the other by the other.

"*Anthem,* a divine song sung alternately by two opposite choirs and choruses.',—*Glossog. Nov.* 2d ed. (1719).

(2) *Now:* A portion of Scripture or of the Liturgy, set to music, and sung or chanted.

There are three kinds of anthems: (1) A verse anthem, which in general has only one voice to a part; (2) a full anthem with verse, the latter performed by single voice, the former by all the choir; (3) a full anthem, performed by all the choir.

Anthropoglossa [Gr. *anthropos,* man; *glossa,* the tongue]. Like the human voice; the vox humana stop in the organ.

Anticipation [Lat. *ante,* before; *capio,* to take]. To introduce a note belonging to the next chord before leaving the preceding chord.

Antiphon [Gr. *anti,* against; *phoneo,* to sing]. A short sentence or anthem sung before and after the psalter for the day.

Antiphony. The responsive singing of two choirs generally placed on opposite sides of the chancel, one called the Decani, on the Dean's side of the chancel, the other the Cantoris, on the precentor's or leader's side. The verses of the psalms are sung by the choirs alternately, but the Gloria by the united choirs.

Anwachsend (Ger.) (*an-vach-sent*). Swelling; crescendo.

Aperto (It.) (*ah-pehr-to*). Open. Direction to use the damper ("loud") pedal.

A piacere (*pee-ah-cheh'-reh*), or **Al piacer,** or **A piacimento** (*pee-ah-chee-men'-to*). At pleasure.

A poco a poco (It.). Little by little.

A poco piu lento (It.). A little slower.

A poco piu mosso (It.). A little faster.

Appassionata (It.) (*ap-pas-sion-ah'-tah*), **Appassionamento** (It.). With strong passion or emotion.

Appassionatamente (It.). Impassioned.

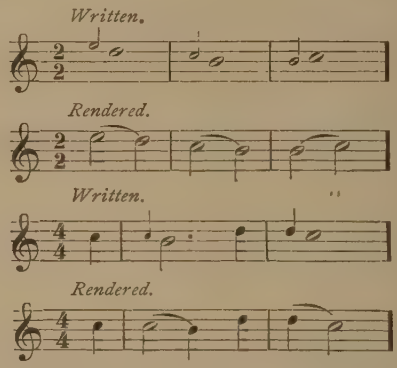
Appenato (It.) (*ap-peh-nah'-to*). Distressfully.

Applicatur (Ger.) (*ap-plee-ka-toor'*). The fingering of a musical instrument.

Appoggiando (It.) (*ap-pod-je-an'-do*). Leaning upon; suspended notes.

Appoggiato (It.). Retardations; syncopations.

Appoggiatura (It.) (*ap-pod-jea-too'-rah*). To lean against. An ornamental note foreign to the harmony, one degree above or below a member of the chord, always on an accent or on a beat. It takes half the value of the note it precedes, but if the note it precedes is dotted, it takes two-thirds of its value.



The modern practice is to write as rendered, thus avoiding any confusion between the appoggiatura and the acciaccatura.

A punto (It.). Accurate, strict time.

A punto d'arco (It.). With the point of the bow.

A quatre mains (Fr.) (*katr-mang*). For four hands.

A quattro mani (It.) (*kwat-tro mah-nee*). For four hands.

Arcato (It.) (*ar-kah'-to*). With the bow; a direction to resume the bow after pizzicato.

Arco (It.). The bow.

Ardente (It.) (*ar-den-teh*). Ardent; fiery.

Ardente (Fr.) (*ar-dongt*). Ardently.

Ardito (It.) (*ar-dee-to*). Ardently; boldly.

Aretinian Syllables. *Ut, re, mi, fa, sol, la,* given by Guido Aretinus to the hexachord. *Ut* was changed to *do,* as being a better vowel for solmization.

Aria (It.) (*ah'-ree-ah*). Air; song. In form the aria consists of three members: Part I, a more or less elaborate melody in the tonic key. Part II, another melody in a related key. Part III, a repetition of the first melody, to which a coda is generally added.

Aria buffa (It.) (*boof'-fah*). An aria with humorous words.

Aria concertante (It.) (*con-cher-tan'-teh*). An aria with obbligato accompaniment of instruments.

Aria di bravura (It.) (*dee-brah-voo'-rah*) or **d'abilita** (*d'ah-bee-lee-tah*). An aria with difficult, showy passages.

Aria fugato (It.) (*foo-gah'-to*). An aria with an accompaniment written in fugue style.

Aria parlante (It.) (*par-lan'-teh*). Literally a speaking aria, one in which the music is designed for declamatory effect. The aria parlante was the precursor of the recitative.

Arietta (It.) (*ah-ree-et'-ta*). A small aria, less elaborate than the aria.

Arioso (It.) (*ah-ree-o'-so*). A short melody at the end of or in the course of a recitation.

Armonia (It.) (*ar-mo'-nee-ah*). Harmony.

Armoniosamente (It.) (*ar-mo-nee-o-sa-men'-teh*), **Armonioso** (It.) (*ar-mo-nee-o'-so*). Harmonious; harmoniously.

Arpa (It.) (*ar'-pah*). Harp.

Arpège (Fr.) (*ar-pehzh'*), **Arpeggio** (It.) (*ar-ped-jeeo*). In harp style. In piano music a direction to play the notes of a chord in rapid succession from the lowest upward. Indicated by

A reversed arpeggio is indicated by

In old music the arpeggio is sometimes indicated thus:

Arpeggiando (It.) (*ar-ped'-jee-an-do*). In harp style.

Arpeggiato (It.) (*ar-ped-jee-a'-to*). Arpeggiated.

Arrangement (Fr.) (*ar-ranzh-mong*). A piece of music written for one or more instruments or voices adapted to other instruments or voices. Also called Transcription.

Ar'sis (Gk.). The unaccented or up beat; the reverse of Thesis, the accented or down beat.

Articolato (It.) (*ar-tik-ko-lah'-to*). Articulated distinctly.

Artig (Ger.) (*ahr-teech*). Neat, pretty, unaffected.

As (Ger.). A flat. **As dur** (*doohr*), A flat major. **As moll,** A flat minor.

Assai (It.) (*as-sah'-ee*). Very, extremely, as Allegro assai, very fast. Adagio assai, very slow.

Assez (Fr.) (*as-seh*). Rather, as **Assez vite** (*veet*), rather quick, or quick enough.

Assoluto (masc.), **Assoluta** (fem.) (It.) (*as-so-loo'-to*). Absolute. Applied to the leading singers of an opera troupe, as Prima donna assoluta, first lady absolute; Prima uomo assoluto, first man absolute.

A suo arbitrio (*soo-oh ar-bee'-tre-o*). At your will.

A tempo (*tem'-po*). In time. A direction to resume strict time after *Rall.* or *Rit., q. v.*

A tempo giusto (*joos'-to*). In strict time.

A tempo rubato (*roo-bah'-to*). In stolen time, *i. e.,* retarding and hurrying the time irregularly.

A tre corde (*tray*). On three strings.

Attacca (It.) (*at-tak'-ka*). Attack. Begin the next movement with slight or with no pause.

Attacca subito (It.) (*soo-bee-to*). Attack quickly, without pause.

Attacco (It.), **Attaque** (Fr.) (*at-tak'*). The motive or theme of an imitation or short fugal subject.

Attaquer (Fr.) (*at-tak-keh*). Same as *Attacca.*

Attack. The manner of beginning a phrase or piece; refers generally to the promptness or firmness of the performer or performers.

Attendant Keys. The keys of the 4th and 5th above, and the relative minors of the principal key and these two major relations, as C F G
Rel. minors A D E

Aubade (Fr.) (*o-bad'*). Morning music; the opposite of *Serenade,* evening music.

Audace (Fr.) (*o-dass*). Bold, audacious.

Aufführung (Ger.) (*owf-fee-roonk*). Performance; representation of an opera.

Aufgeregt (Ger.) (*geh-rehgt*). With agitation.

Aufgeweckt (Ger.) (*geh-vekt*). With animation.

Aufhalten (Ger.) (*hol-ten*). To suspend (of dissonances). Also, to hold back or retard (of time).

Aufhaltung (Ger.) (*hol-toonk*). Suspension.

Auflösen (Ger.) (*leh-zen*). To let loose; resolve a dissonance.

Auflösungszeichen (Ger.) (*leh-soonks-tzeich-en*). Releasing sign; the ♮.

Aufschlag (Ger.). Up beat.

Aufschwung (Ger.) (*owf-shvoonk*). Soaring, elevation.

Aufstrich (Ger.). Up bow.

Auftakt (Ger.). The unaccented part of the measure, or the fraction of a measure, at the beginning of a piece.

Augmentation. When the theme of a fugue or imitation is given in notes of double or quadruple the length of those in its original form.

Augmented. (1) Any interval greater than perfect or major. (2) A theme written in notes of greater value than in its original form.

Augmented Sixth Chord. Called also extreme sharp sixth; superfluous sixth; when formed thus, A♭ C F♯, the Italian sixth; thus, A♭ C D F♯, the French sixth; thus, A♭ C E♭ F♯, the German sixth.

Augmenter (Fr.) (*og-mong-teh*). To increase in force. Same as *Crescendo.*

Ausarbeitung (Ger.) (*ows'-ar-bye-toonk*). Development; the working out of a fugue or sonata, etc.

Ausdruck (Ger.) (*drook*). Expression.

Ausdrucksvoll (Ger.). With expression; literally, full of expression.

Ausführung (Ger.) (*fee-roonk*). Execution; manner of performance.

Ausweichung (Ger.) (*veich-oonk*). Literally, evasion; modulation; change of key.

Authentic. The Ambrosian scales. A melody that lies between the keynote and its octave is called authentic. One that lies between the fourth below and the fifth above the keynote is called plagal. These terms are only used in the ecclesiastical modes.

Authentic. The church scales beginning and ending on any given tonic (except B).

Authentic Cadence. Tonic preceded by dominant.

Autoharp. A modern instrument resembling a zither, of easy performance. The plectrum is drawn across all the strings at once, and those that it is not desired to sound are silenced by a series of dampers controlled by the left hand of the player.

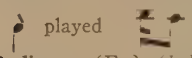
Auxiliary Note. Grace note; appoggiatura.

Auxiliary Scales. Related scales.

B

B. The seventh or leading tone of the natural major scale; in German, the note or key of B♭, B♮ being called H.

Baborak or **Baboracka.** A Bohemian dance.

Backfall. An ornament in harpsichord or lute music, written  played

Badinage (Fr.) (*bah-dee-naje*). Banter; raillery.

Bagatelle (Fr.) (*bah-gah-tell*). A trifle; a name frequently given to short pieces of music.

Bagpipe. An instrument consisting of a leather bag into which air is forced either from a bellows or by the mouth of the player; furnished with from two to four pipes, one pipe with double reed pierced with holes, upon which the melody is played, called in Scotland the chanter; the remaining pipes, with single reeds, called drones, sound continuously the first and fifth of the scale or first, fifth and octave.

Bajadere or **Bayadere** (*by-a-dehr*). East Indian dancing girl.

Bakkia (*bak-kee-ah*). A Kamchadale dance.

Balabile (It.) (*bah-lah-bee'-leh*). Any piece of music written for dancing purposes.

Ballad. A simple song, originally a song to accompany dancing; derived from the low Latin word *ballare,* to dance; in its French form, *ballade,* it is used by modern composers as a title for extended lyric compositions, as the ballades of Chopin.

Balladenmässig (Ger.) (*bal-la'-den-meh-sich*). In ballad style.

Ballad-opera. An opera made up of simple songs, and without recitative.

Balafo (*bah-lah-fo*). An African instrument resembling the xylophone; a South American variety is called the marimba.

Balalaika (Russ.) (*bah-lah-lye'-ka*). A Russian guitar with three or four strings, the body triangular.

Ballata (It). A ballad.

Ballerina (It.) (*bal-leh-ree'-nah*). A female ballet dancer.

Ballet (Eng.), called also *Fa-la.* An old form of part song in simple counterpoint.

Ballet (Fr.) (*bal-leh*). A combination of music and dancing, designed to tell a story in pantomime.

Balletto (It.) (*bal-let'-to*). A ballet. Used as a name for a movement by Bach.

Ballo (It.). A dance; a ball.

Ballo in maschera (*mas-keh-rah*). Masked ball.

Band. (1) A company of instrumentalists. (2) The term is used to distinguish the various groups of instruments in the orchestra; as, string band, wood band, brass band. (3) The commonest use of the word is as applied to a company of players on brass instruments. (4) A band composed of wood and brass instruments is called a harmony band.

Band (Ger.) (*bont*). A volume; a part.

Banda (It.) (*ban-dah*). A band.

Bandola (*ban-do'-lah*). A variety of mandolin.

Bandora (Fr.) (*ban-do'-rah*), **Bandore** (Eng.), **Pandoura** (Gk). An obsolete instrument of the guitar family.

Bandurria (Span.) (*ban-door-ree-ah*). A variety of guitar with wire strings.

Banger, Bania, Banja, Banjo. An instrument resembling a guitar, with a circular body, consisting of a broad hoop of wood covered with parchment, generally provided with five strings. The modern banjo is furnished with frets and with a screw mechanism to tighten the parchment.

Bar. A line drawn across the staff or staves to divide the music into portions of equal duration. The portion enclosed between two bars is called a measure. The almost universal custom of musicians, however, is to use *bar* in the sense of measure.

Barbaro (It.) (*bar'-bah-ro*). Savagely; ferocious.

Barbiton (Gk.). (1) A variety of lyre. (2) A string instrument resembling the violoncello (obsolete).

Barcarole, Barcarolle (Fr.) (*bar-ca-rol*), **Barcarola** (It.) (*bar-ca-ro-lah*), **Barcaruola** (It.) (*bar-ca-roo-o-la*). A boat-song; gondolier's song; vocal or instrumental compositions in the style of the Venetian gondoliers' songs.

Barem (Ger.) (*bah-rehm*). A soft organ-stop; closed pipes of eight- or sixteen-foot tone.

Bargaret (Fr.) (*bar-gah-reh*), **Barginet** (Fr.) (*bar-zhee-neh*), **Berginet** (Fr.) (*behr-zhee-neh*), **Bergiret** (Fr.) (*behr-zhee-reh*). A shepherd's song; pastoral song. From *berger* (Fr.), a shepherd.

Baribasso (It.). A deep bass voice.

Bariolage (Fr.) (*bah-ree-o-laje*). A medley; a series of cadenzas.

Baritenor. A low tenor.

Baritone. A brass instrument; a clarionet of low pitch; an obsolete variety of the viol family; the male voice ranging between bass and tenor (also written barytone); the F clef on the third line (not used now).

Barocco (It), **Barock** (Ger.), **Baroque** (Fr.) (*ba-rok*). Irregular; whimsical; unusual.

Barquade, Barquarde (Fr.) (*bar-kad, bar-kard*). Same as *Barcarole.*

Barré (Fr.) (*bar-reh'*). In guitar playing, pressing the first finger of the left hand across all the strings; the finger acts as a temporary "nut," raising the pitch of the strings.

Barre (Fr.) (*bar*). Bar.

Barre de répétition. A double bar with repeat marks.

Bas dessus (Fr.) (*bah-des-soo'*). The mezzo-soprano voice.

Base. Old way of writing bass.

Bass, Basso (It.), **Basse** (Fr.), **Bass** (Ger.). Low; deep.

Basse chantante (Fr.) (*shan-tont*). Baritone voice.

Basse chiffrée (Fr.) (*shif-freh*). Figured bass.

Basse continué (Fr.). Same as *Figured Bass.*

Basse de cremone (Fr.) (*creh-mone*). Bassoon.

Basse d'harmonie (Fr.) (*d'ar-mo-nee*). The ophicleide.

Basse de hautbois (Fr.). The English horn.

Basse de viole (Fr.). Violoncello.

Basse de violon. The double bass.

Basse taille (Fr.) (*tah-ee*). Baritone voice.

Bass-bar. A strip of wood glued to the belly of instruments of the violin family under the lowest string.

Bass Clef. The F clef on the fourth line.

Bass-Flöte (Ger.) (*fla-teh*). A low-pitch flute.

Bass-Geige (Ger.). The violoncello.

Bass-Pommer (Ger.). An obsolete ancestor of the bassoon.

Bass-Posaune (Ger.) (*po-zow-neh*). Bass trombone.

Bass-Schlüssel (Ger.) (*schlis-sel*). Bass clef.

Bass-Stimme (Ger.) (*stim-meh*). Bass voice or part.

Bass Tuba. A brass instrument of low pitch.

Bass Viol. The largest viol of a set or "chest" of viols.

Bass Voice. The lowest male voice.

Basset Horn. A variety of the clarionet, ranging from F below bass staff to C above treble staff; rich quality of tone; a favorite of Mozart, who used it in several of his operas and in his Requiem Mass.

Bassetto (It.). An eight- or sixteen-foot reed-stop in the organ; obsolete name for viola.

Basso (It.). The lowest part; a bass singer.

Basso buffo (It.). A comic bass singer.

Basso cantante (It.) (*can-tan'-teh*). A vocal or singing bass.

Basso concertante (It.) (*con-cher-tan'-teh*). The principal bass that accompanies solos and recitatives.

Basso continuo (It.). A figured bass.

Basso obbligato (It.) (*ob-blee-gah'-to*). An essential bass; one that may not be dispensed with.

Basso ostinato (It.) (*os-tee-nah'-to*). Literally, obstinate bass; a continuously repeated bass with constant variation of the upper parts; generally used as the foundation of that member of the suite called the Passacaglio.

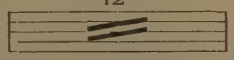
Basso profundo (It.). A very deep, heavy bass voice.

Basso ripieno (It.) (*ree-pee-eh'-no*). A "filling up" bass. See *Ripieno.*

Bassoon, Basson (Fr.), **Fagotto** (It.), **Fagott** (Ger.). A wood-wind instrument with double reed; the bass of the wind band; compass from B♭ below bass staff to B♭ in treble staff (two or three higher notes are possible).

Basson quinte (Fr.) (*kangt*). A bassoon a fifth higher than the preceding.

Bâton (Fr.). (1) The stick used by a conductor; also, figuratively, his method of conducting. (2) A pause of several measures, signified thus



in modern music, viz.: one or two heavy diagonal lines with figures over to indicate the number of bars rest.

Batterie (Fr.) (*bat-teh-ree*). (1) The roll on the drum. (2) Repeated or broken chords played staccato. (3) Striking instead of plucking the strings of the guitar.

Battuta (It.) (*bat-too'-tah*). A measure or bar.

Bauerpfeife (Ger.) (*bower-pfifeh*). An 8-foot organ-stop of small scale.

Baxoncillo (Sp.) (*bah-hon-theel'-yo*). Open diapason.

Bayadere. See *Bajadere.*

Bayles (Sp.) (*bahl-yehs*). Comic dancing songs.

Bearings or **Bearing Notes.** The notes first tuned by an organ- or piano-tuner as a guide to the rest.

Beat. (1) The motion of the hand or baton by which the time (rate of movement) of a piece is regulated. (2) The equal parts into which a measure is divided. (3) The throbbing heard when two sounds not exactly in unison are heard together. (Beats are also produced by other intervals.)

Bebung (Ger.) (*beh-boonk*). Trembling; an effect obtained on the obsolete clavichord by rapidly vibrating the finger up and down without raising it from the key; the tremolo-stop in an organ.

Becken (Ger.). Cymbals.

Begeisterung (Ger.) (*be-geis'-te-roonk*). Spirit; excitement.

Begleitung (Ger.) (*be-glei'-toonk*). Accompaniment.

Beklemmt (Ger.) (*beh-klemt'*). Anxious; oppressed.

Bell. (1) A cup-shaped metal instrument. (2) The cup-shaped end of brass and some wood instruments.

Bell Diapason, Bell Gamba. Organ-stops with bell-shaped mouth.

Bellezza (It.) (*bel-let'-sa*). Beauty of expression.

Bellicosamente (It.) (*bel-le-co-sa-men'-teh*). In a warlike manner; martially.

Belly. The upper side of instruments of the violin and guitar families.

Bémol (Fr.) (*beh-mol*). The sign ♭.

Ben (It.) (*behn*). Well; as, **ben marcato,** well marked.

Bene placito (It.) (*beh-neh pla-chee'-to*). At pleasure.

Béquarre or **Bécarre** (Fr.) (*beh-kar*). The sign ♮.

Berceuse (Fr.) (*behr-soos*). A cradle-song; lullaby.

Bergomask or **Bergamask.** A lively dance in triple time.

Bes (Ger.) (*behs*). B double flat.

Bestimmt (Ger.). With energy; con energia.

Bewegt (Ger.) (*beh-vehgt'*). Moved; with emotion; con moto.

Bewegung (Ger.) (*beh-veh'-goonk*). Motion.

Bien-chanté (Fr.) (*be-ang-shong-teh*). Literally, well sung; smoothly; cantabile.

Bifara (Lat.). An organ-stop; same as *Vox angelica;* two pipes not in perfect unison.

Binary Form. A movement founded on two principal themes.

Binary Measure. A measure with two beats.

Bind. A tie. The same sign, when over two or more notes on different degrees, is called a slur.

Bis (Lat.). Twice. When placed over a short passage, inclosed thus, $\overset{\frown}{\text{Bis}}$ signifies that it is to be played twice.

Bit. A small piece of tube used to lengthen the trumpet or other brass instrument to alter the pitch.

Bizzarramente (It.) (*bid-zarra-mente*), **Bizzaria** (It.) (*bid-zarria*), **Bizzaro** (It.) (*bid-zarro*). Bizarre; fantastic; odd; droll.

Blanche (Fr.) (*blongsh*). A half-note; minim.

Blanche pointée (*poin-teh*). A dotted half-note.

Blase-Instrument (Ger.) (*blah-zeh*). Wind instrument.

Bob. A technical term in bell ringing.

Bocca (It.). The mouth. **Con bocca chiusa** (*kee-oo-sa*), with closed mouth; humming.

Bocca ridente (It.) (*ree-den'-teh*). Smiling mouth; the proper position of the mouth in singing.

Bocktriller (Ger.). A bad trill. (Literally, goat's bleat.)

Bois (Fr.) (*bo-a*). Wood. **Les bois,** the wood wind.

Bolero (Sp.) (*bo-leh-ro*). Spanish dance in $\frac{3}{4}$ time; also called **Cachuca** (*ka-choo-ka*).

Bombard, An 8 or 16-foot reed-stop in the organ.

Bombardon. A large, deep-toned brass instrument.

Bouché (masc.), **Bouchée** (fem.) (Fr.) (*boo-sheh*). Closed. Applied to organ-stops with closed mouth.

Bouffe (Fr.) (*boof*). Comic.

Bourdon. (1) A closed organ-stop of 16 or 32-foot tone. (2) In France also 4 and 8-foot stops, analogous to the stop diapason, are so called. (3) A drone bass. (4) The largest bell of a chime.

Bourrée (Fr.) (*boo-reh*). A rapid dance $\frac{4}{4}$ or $\frac{2}{4}$ time, frequently used as one of the movements in a suite.

Bow. (1) The implement of wood and horse-hair by means of which the strings of the violin family of instruments are set in vibration. (2) The rim of a bell.

Bowing. (1) The art of managing the bow. (2) The signs indicating the way in which the bow is to be used.

Brabançonne (Fr.) (*bra-ban-sonn*). The Belgian national air.

Brace. The sign { used to join two or more staves.

Bransle (Fr.) or **Branle** (*brongl*), **Brawl.** An ancient French dance in $\frac{4}{4}$ time.

Bratsche (Ger.) (*bratch-eh*). The viola. Corruption of the Italian **Braccia** (*brats-chia*), the arm-viol.

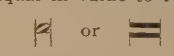
Bravo (masc.) (It.), **Brava** (fem.) (*bra-vah*), **Bravi** (plu.) (*bra-vee*). Literally, brave. Used to applaud performers, meaning "well done."

Bravura (It.) (*bra-voo'-rah*). Boldness; brilliancy. A composition designed to exhibit the powers of the performer.

Break. (1) The point at which the register of the voice changes. (2) The point at which the lower octave is resumed in compound organ-stops. (3) The point where the quality of the tone changes in wood instruments (of the clarionet family especially).

Breit (Ger.) (*bright*). Broad; stately.

Breve [from Lat. *brevis,* short]. Formerly the shortest note; now the longest, equal in value to two whole notes. Made



Bridge. A piece of wood resting on the sound-board or resonance box, upon which the strings of piano, violin, guitar, etc., rest.

Brillante (Fr.) (*bree-yant*), **Brillante** (It.) (*breel-lan-teh*). Brilliant.

Brindisi (It.) (*brin-dee'-zee*). Drinking song in $\frac{2}{4}$ or $\frac{6}{8}$ time, so written as to resemble the Tyrolese Jodl.

Brio (It.) (*bree-o*). Fire; spirit.

Brioso (It.). Cheerfully; briskly; joyfully.

Broken Cadence. An interrupted cadence.

Broken Chords. See *Arpeggio.*

Brumm-Stimmen (Ger.). Humming voices; con bocca chiusa.

Bruscamente (It.) (*broos-ka-men'-teh*). Roughly; strongly accented.

Brustwerk (Ger.) (*broost-vehrk*). The pipes in the organ belonging to the swell or choir organ.

Buca (It.), **Schall-Loch** (Ger.). The sound-hole of a guitar, mandolin, etc.

Buccolica (It.) (*buk-ko'-li-ka*), **Bucolique** (Fr.) (*boo-ko-leek*). In a rustic style.

Buffo (masc.), **Buffa** (fem.). A comic opera, or air, or singer.

Bugle. (1) A straight or curved hunting horn. (2) A keyed horn, generally made of copper. Chiefly used for military signals.

Burden. Old name for the refrain or chorus to a song.

Burletta (It.). A musical farce.

Busain. A 16-foot reed-organ stop.

C

C. The first note in the natural major scale. Middle C, the C lying between the fifth line of the bass staff and first line of the treble staff; the C clef or always signifies this C.

Cabaletta (It.). ("A little horse," so called from the rapid triplet accompaniment generally used with it.) A vocal rondo, the theme often repeated with elaborate variations.

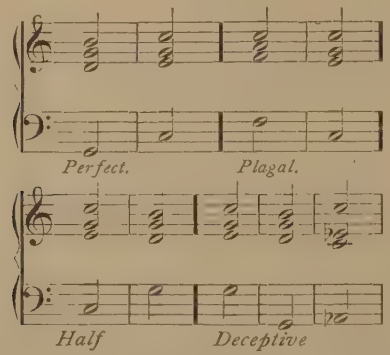
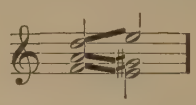
Cabinet-d'orgue (Fr.) (*ca-bee-neh-d'org*). Organ case.

Cabinet Organ. A reed organ (American) in which the air is drawn instead of forced through the reeds.

Cabinet Piano. An old-style lofty upright piano.

Caccia (It.) (*cat'-chia*). Hunting chase.

Cachucha (Sp.) (*ca-choo'-cha*). The same as *Bolero.*

Cadence [from Lat. *cado,* to fall]. The end of a phrase, part, piece. The principal cadences are as follows: whole, or perfect, dominant to tonic; half, or imperfect, tonic to dominant; deceptive, dominant to subdominant or submediant.

Plagal cadence, subdominant to tonic. In the perfect cadence the dominant is generally preceded by the 6-4 of the tonic; in the half cadence the 6-4 of the tonic before the dominant which is the final; half and deceptive cadences are used in the course of a piece; perfect and plagal at the end. The Phrygian cadence consists of the following chords:

A long, brilliant, vocal or instrumental flourish introduced just before the close, or before the return of the principal theme, is also called a cadence (in Italian, cadenza).

Cadenz or **Kadenz** (Ger.). Cadence.

Cadenza (It.). A cadence. The Italian word is generally used when applied to the kind of passage described above.

Ça-ira (Fr.) (*sah-era*). That will do; lit., that will go. A revolutionary song in France.

Caisse (Fr.) (*case*). A drum.

Caisse claires (*clare*). Kettle drums. **Grosse Caisse,** large drum.

Caisse roulante. Side or snare drum.

Cal'amus (Lat.). A reed. From this are derived the words **Chalumeau** (Fr.) (*sha-loo-mo*), the first register of the clarionet, and **Shawm,** an obsolete reed instrument used in the Bible as the translation of a Hebrew instrument.

Calan'do (It.) [from *calare,* to go down or decrease]. Getting both slower and softer.

Calandrone (It.) [*calandra,* a lark]. A small reed instrument resembling the clarionet.

Cala'ta (It.). A lively dance in $\frac{3}{4}$ time.

Calcan'do (It.) [from *calcare,* to tread upon]. Hurrying the time.

Call. A military signal, given by drum or bugle.

Calma (It.). Calm, quiet.

Calma'to (It.). Calmed, quieted.

Calore (It.) (*kal'-o-reh*). Warmth, passion.

Caloro'so (It.). Warmly, passionately.

Cambiata (It.) (*camb-ya'-ta*) [from *cambiare,* to change]. **Nota cambiata,** changing note; a dissonant struck on the accent.

Camera (It.) (*ka'-meh-ra*). Chamber. **Musica di camera,** chamber music.

Camminan'do (It.) [from *camminare,* to travel or walk]. Walking, flowing. Same as *Andante.*

Campa'na (It.). A bell.

Campanello (It.) (*kam-pah-nel'-lo*). A small bell.

Campanet'ta (It.). Instrument consisting of a series of small bells tuned to the musical scale, played either with small hammers held in the hands, or by means of a keyboard.

Campanology. The art of making and using bells.

Canaries. A lively dance in $\frac{6}{4}$ time, of English origin.

Can'crizans [Lat. *cancer,* a crab]. A term applied to a canon in which the "follower" takes the theme backward.

Canon (Lat.). Law or rule. (1) The measurement of the ratios of intervals by means of the monochord. (2) A musical composition in which each voice imitates the theme given out by the leading voice; this imitation may be at any interval above or below, or may begin at any point of the theme. There are many varieties of the canon. The following are the most important, if any importance attaches to such dry productions: **Close Canon,** the entrance of the voices indicated by a sign; the parts not written out. **Open Canon,** the reverse of this; *i. e.,* written in full. **Finite Canon,** one with an ending. **Infinite Canon,** one without an ending.

There are also canons by augmentation, by diminution, by inversion, by retrogression (cancrizans), etc., etc.

Canonic Imitation. See *Canon.*

Cantabile (It.) (*can-tah'-bee-leh*) [from *cantare,* to sing]. In a singing style.

Cantan'do (It.). Singing.

Canta'ta. (1) A mixture of aria and recitative for one voice. (2) A short oratorio, or a secular work in oratorio form, sung without costume or action.

Cantatore (It.) (*can-ta-to'-reh*). A singer, male.

Cantatrice (It.) (*can-ta-tree'-cheh*). A singer, female.

Cantilina (Lat.). (1) A folk-song. (2) A solfeggio. (3) A smooth-flowing melody. (4) Anciently the Cantus firmus.

Canticle (Lat.). (1) A song of praise. **Cantico** (It.), **Cantique** (Fr.) (*kan-teek*), **Lobgesang** (Ger.) (*lope-ge-zang*). (2) The parts of Scripture—Te Deum and Benedicite Omina Opera—that form the chief part of the musical service of the Protestant Episcopal Church.

Cantino (It.). See *Chanterelle.*

Canto (It.). The air; the melody; upper part.

Canto a capella (It.). Sacred music.

Canto fermo (It.). Cantus firmus.

Canto figura'to (It.). Florid melody; melody with variations.

Canto primo (It.). First soprano.

Canto recitativo (It.). Declamatory singing.

Canto ripieno (It.) (*ree-pe-eh'-no*). Additional soprano chorus parts.

Canto seconda (It.). Second soprano.

Cantor (Lat.), **Kantor** (Ger.). A precentor.

Cantore (It.). A singer; chorister.

Cantoris (Lat.). The side of a cathedral choir (the north) where the cantor sits is called the cantoris; the opposite side is called the decani side, where the dean sits.

Cantus (Lat.). Song.

Cantus ambrosia'nus (Lat.). Plain song.

Cantus firmus. The plain song or chant.

Cantus mensura'bilis (Lat.). Measurable song; name given to music when first written with notes of definite length.

Canzona (It.) (*cant-so'-na*). (1) A part song in popular style. (2) An instrumental composition in the old sonata form. (3) An indication of lively, rapid movement.

Canzonette (Fr.) (*can-so-net*), **Canzonetta** (It.), **Canzonet** (It.). A short part song.

Capella (It.). Church. **Alla capella,** in church style.

Capellmeister (Ger.) (*ka-pel'-meis'-ter*). Master of the chapel; the head of the musical establishment of a noble or princely house.

Capellmeister-Musik (Ger.). Music made to order without inspiration is so called in Germany.

Capo (It.). Head; beginning. **Da capo,** from the beginning.

Capodastro (It.). Same as *Capo tasto.*

Capo tasto (It.). Head stop. A clamp which is screwed on the finger-board of the guitar, so as to "stop" all the strings, thus raising the pitch to any degree desired.

Capriccietto (It.) (*ca-pree-chee-et'-to*). A little caprice.

Caprice (Fr.) (*ca-prees'*), **Capriccio** (It.) (*caprit'-chio*). A whim; freak; composition without form. In German, Grille.

Caricato (It.) (*ca-ree-ca'-to*). Overloaded with display.

Carillon (Fr.) (*car-ee-yong*). (1) A set of bells played by hand or by machinery. (2) A mixture-stop in the organ.

Carilloneur (Fr.) (*ca-ree-yo-nure*). One who plays the carillon.

Carmagnole (Fr.) (*car-man-yole*). A wild song and dance of the French Revolution.

Carol. A song of praise, usually sung at Christmas and at Easter.

Carola (It.). See *Carmagnole.*

Carrée (Fr.). A breve.

Carressant (Fr.) (*ca-res-sawnt*), **Carrezzando** (It.) (*car-retz-zan'-do*), **Carrezzevole** (It.) (*car-retz-zeh'-vo-leh*). In a caressing manner.

Cassa grande (It.). The large drum.

Cassatio (It.) (*cas-sa-shio*). A suite; cassation.

Castanets, from *castagna* (It. *castanya,* a chestnut), **Castagnette** (It.) (*cas-tan-yet-teh*), **Castanettes** (Fr.) (*cas-tan-yet*), **Castañuelas** (Sp.) (*cas-tan-yu-eh-las*). Small wooden clappers used to mark the rhythm.

Catch. A species of canon so contrived that the meaning of the words is distorted.

Catena di trilli (It.) (*cat-teh-na dee trillee*). A chain or succession of trills.

Catgut. The usual name for gut-strings, made in reality from sheeps' intestines.

Catlings. The smallest lute strings.

Cattivo tempo (It.) (*cat-tee-vo*). The weak beat; literally, bad beat.

Cauda (Lat.). The tail or stem of a note.

Cavalet'ta (It.). See *Cabaletta.*

Cavalet'to (It., little horse). (1) Small bridge. (2) The break in the voice.

Cavatina (It.) (*cah-vah-tee'-nah*). A short air; a song without a repetition of the first member.

C Clef. See *Clef.*

Cebell. A theme consisting of alternate passages of high and low notes, upon which "divisions" or variations were played on the lute or viol.

Celere (It.) (*cheh'-leh-reh*). Quick, rapid.

Celerita (It.) (*che-leh'-ree-tah*), **con.** With speed.

Celeste (Fr.). Celestial. The soft pedal of the piano.

Cello (It.) (*chel-lo*). Abbreviation of violoncello.

Cembalo (It.) (*chem'-ba-lo*). Harpsichord; piano.

Cembalist (It.) (*chem-ba-list*). A pianist.

Cembanella or **Cennamella** (It.). A flute or flageolet.

Cercar la nota (It.) (*cher-car la no-ta*). To slur or slide from one note to the next. Same as *Portamento*.

Ces (Ger.) (tsehs). Cb.

Chacona (Sp.) (*cha-co'-na*), **Ciaconna** (It.) (*chea-con'-na*), **Chaconne** (Fr.) (*sha-con*). A slow dance in $\frac{3}{4}$ time, written on a ground bass of eight measures, sometimes introduced in the suite.

Chair Organ. Choir organ.

Chalameau (*shah-lah-mo*) or **Chalumeau** (Fr.). See *Calamus*.

Chamber Music. Vocal or instrumental music suitable for performance in small rooms. Generally applied now to sonatas, trios, quartets, etc., for instruments.

Change of Voice. (1) Passing from one register to another. (2) The change from the child's to the adult's voice in boys. Generally occurs between fourteen and seventeen years of age.

Changes. The various melodies produced by the various ways in which a chime is rung.

Change Ringing. The art of ringing chimes.

Changing Chord. A chord struck with a bass that is not a member of the chord.

Changing Notes (nota cambiata, It.). Dissonant notes struck on the beat or accent; appoggiaturas.

Chanson (Fr.) (*shan-song*). A song, a part song; formerly a part song resembling a madrigal.

Chansonnette (Fr.) (*shan-son-net*). A little song.

Chant. A form of composition in which reciting notes alternate with phrases sung in time. There are two forms of chant, Anglican and Gregorian. The Anglican chant may be single, *i. e.*, with the reciting notes and two inflections (phrases in time), or double, that is, the length of two single chants. The Gregorian chant consists of: (1) The intonation. (2) The dominant or reciting note. (3) The mediation (analogous to the inflection, but not in strict time). (4) The dominant again. (5) Ending or cadence. The chant was undoubtedly first sung to metrical words, therefore was as rhythmic as a modern melody. This rhythmic character has been lost by adapting prose words to it.

Chant (Fr.) (*shawnt*). Song; melody; tune; vocal part.

Chantant (Fr.) (*shong-tawnt*). Singing. **Café chantant,** a café where singing is part of the entertainment.

Chanter. (1) A singing priest. (2) The melody pipe of the bagpipe.

Chanterelle (Fr.) (*shong-ta-rell*). The highest string of the violin, viola, and violoncello; also of the guitar and lute.

Chanteur (Fr.) (*shong-ture*). A singer (male).

Chanteuse (Fr.) (*shong-toose*). A singer (female).

Chant pastoral (Fr.). Shepherd's song.

Characters. The signs used in written music.

Characterstimme (Ger.). Lit., character voice; any solo-stop on the organ.

Characterstücke (Ger.) (*ka-rak'-ter-stee-ke*). Character pieces; descriptive music, as the pastoral symphony.

Chasse, à la (Fr.) (*a la shass*). In the hunting style.

Chef d'attaque (Fr.) (*shef d'at-tak*). The chorus leader, or leading instrument of any division of the orchestra.

Chef d'oeuvre (Fr.) (*shef d'oovr*). Master-work.

Chef d'orchestre (Fr.) (*shef d'or-kestr*). Conductor of the orchestra; leader.

Chest of Viols. A "chest" containing two trebles, two tenors, and two basses. Called also "consort of viols."

Chest Tone. The lowest register of the voice—male or female.

Chevalet (Fr.) (*she-va-leh*). Bridge of string instruments.

Chiara (It.) (*ke-ah-rah*). Clear, pure.

Chiaramente (It.) (*ke-ah-rah-men'-teh*). Clearly, distinctly.

Chiarezza (It.) (*ke-ah-ret'-za*), **con.** With clearness.

Chiarina (It.) (*ke-ah-ree'-na*). Clarion.

Chiave (It.) (*ke-ah'-veh*). Key or clef.

Chica (Sp.) (*chee-ka*). Old Spanish dance. The original of Giga, Jigue, and Jig.

Chiesa (It.) (*ke-eh'-sa*). Church. **Concerto da chiesa,** a church concert. **Sonata da chiesa,** a church sonata.

Chime. A set of bells, generally five to ten. To chime; to play a set of bells by striking them with hammers or by swinging their clappers. **Chime Ringing** is to swing the bells themselves.

Chirogymnast, Chiroplast. Obsolete machines for strengthening the fingers of pianists and keeping them in position.

Chitarra (It.) (*kit-tah'-rah*). Guitar.

Choeur (Fr.) (*koor*). Chorus, choir.

Choir. (1) A company of church singers. (2) The part of the church appropriated to the singers. In English churches (Anglican) the choir is divided into two parts, called the decani, or choir on the dean's side, and cantori, or choir on the cantor's side. When chanting, they usually sing antiphonally, joining in the "gloria." In anthems the words decani and cantoris are printed to indicate which side is to sing a given part.

Choir Organ. One of the divisions of the organ, the manual for which is generally the lowest. Was originally called chair organ; called in France *prestant*.

Chor (Ger.) (*kore*). Chorus, choir; a number of instruments of the same kind.

Choragus (Lat.). (1) Leader of a chorus. (2) A musical official at Oxford University, England.

Choral. (1) For a chorus. (2) An old form of psalm-tune.

Choral Service. A service of which singing is the most prominent part.

Chord, Akkord (Ger.), **Accord** (Fr.), **Accord** (It.). A combination of three or more sounds—common or perfect chord, or triad. Consists of any sound with its third and fifth; it is called major when the interval from one (or root) to three contains two whole tones; minor, when it contains a tone and a half; diminished, if there are three whole tones from one to five; augmented, if there are four whole tones from one to five. A chord is inverted when its root is not at the bass; chords with more than three letters are dissonant chords, called chords of the seventh if they contain four letters, chords of ninth if they contain five letters, etc., etc. Chords bear the name of the degree of the scale upon which they are written: First, tonic; second, supertonic; third, mediant; fourth, subdominant; fifth, dominant; sixth, submediant; seventh, leading note or diminished chord.

Chorister. A chorus- or choir-singer; a precentor.

Chorus. (1) A company of singers. (2) The refrain of a song. (3) A composition for a company of singers. (4) The mixture-stops in an organ.

Chromatic, Chromatisch (Ger.), **Chromatique** (Fr.), **Cromatico** (It.). (1) Sounds foreign to the key. (2) A scale, consisting of half-tones. Chromatic chord, one including foreign sounds. Foreign to the key; chromatic interval, one not found in the major scale; chromatic half-tone, changing the pitch without changing the letter, as C, C♯.

Church Modes. The scales derived from the Greek, in which Gregorian music or plain songs are written.

Cimbal. A dulcimer; harpsichord.

Cimbali (It.) (*chim-ba-lee*). Cymbals.

Cimbalo (It.) (*chim'-ba-lo*). See *Cembalo*. Also a tambourine.

Cimbel (Ger.) (*tsim-bel*). A mixture-stop in the organ.

Cink (Ger.) (*tsink*), **Cinq** (Fr.) (*sank*). A small reed-stop in the organ.

Cinque pace (Fr.) (*sank pace*). An old French dance. In old English, sink a pace.

Circular Canon. One which ends a half-tone higher than it begins, consequently will, if repeated often enough, go through all the keys.

Circulus (Lat.). A circle; the old sign for what was called perfect time, three beats in the measure; for imperfect time, two beats in the measure, the circle was broken in half, thus, C. It is from this the sign for common time is derived; it is not as is generally supposed the letter C.

Cis (Ger.) (*tsis*). C sharp.

Cithara (Lat.). An ancient lute.

Citoli. Old name for the dulcimer.

Civetteria (It.) (*chee-vet-tee'-rea*), **con.** With coquetry.

Clairon (Fr.). Clarion.

Clangtint. A term introduced by Tyndall to designate the quality of sounds (translation of Ger. *Klangfarbe*); means much the same thing as the French word *timbre*.

Claque bois (Fr.) (*clack boa*). The xylophone; in German, Strohfiedel; straw fiddle. Italian, Organo di legno. Graduated strips of hard wood laid on supports made of straw, played by striking with small hammers held in the hands.

Clarabella. An eight-foot soft organ-stop.

Clarabel Flute. The same stop when of four-foot tone.

Clarichord. An old variety of the harpsichord.

Clarinet or **Clarionet** (a little clarion). A wind instrument with a beating reed, invented in 1654 by Denner. The compass of the clarinet is from E third space bass to the second C above the treble (the highest octave is rarely used). Clarinets are made in several keys; those used in the orchestra are in C, B♭ and A; the B♭ clarinet sounds a whole tone lower than the written notes, the A clarinet a minor third lower; alto and bass clarinets are also used, the former in F and E♭, the latter an octave below the ordinary clarinet. The clarinet has four well-marked registers: the first, or chalumeau, extends from the lowest note to the octave above; second to B♭ in treble staff; third to C above treble staff; fourth the rest of the compass.

Clarinetto (It.), **Klarinette** (Ger.), **Clarinette** (Fr.). The clarinet.

Clarino (It.) (*clah-ree-no*). Clarion or trumpet; an organ-stop; four-foot reed.

Claviatur or **Klaviatur** (Ger.) (*kla-fee-a-toor'*). Keyboard.

Clavicembalo (It.) (*cla-vee-chem'-ba-lo*). Keyed dulcimer; the harpsichord.

Clavichord. An instrument resembling a square piano. The strings were vibrated by forcing wedge-shaped pieces of brass called tangents against them. By depressing the keys, the tangent acted both as a means of vibrating the string and as a bridge. When the finger was raised, the string was damped by a piece of woolen cloth wrapped round it, between the tangent and the pin-block. The chief interest in this obsolete instrument is the fact that it was the favorite of J. S. Bach.

Claviçon (Fr.) (*cla-vee-soong*) [from Lat. *clavis*, a key]. The harpsichord.

Clavicytherium. A variety of harpsichord.

Clavier or **Klavier** (Ger.) (*klah-feer'*). (1) Keyboard. (2) Used as a name for the pianoforte.

Clavier (Fr.) (*klah-vee-eh*). An organ manual.

Clavierauszug (Ger.) (*klah-feer-ows-tsoog*). A pianoforte score or edition.

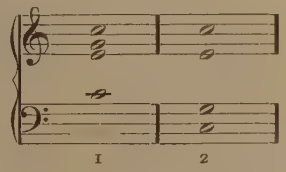
Clef [from Lat. *clavis*, a key]. A sign placed on the staff to indicate the names and pitch of the sounds. Three clefs are used in modern music: (1) The treble or G clef,
also called violin clef; this is now always placed on the second line. (2) The C clef:

this clef, when on first line, is called soprano clef; on second line, mezzo-soprano clef; on third line, alto clef, also viola or alto trombone clef; on fourth line, tenor clef; used also for upper notes of violoncello and bassoon. The C clef always signifies middle C; that is, C that lies between the fifth line bass staff and first line treble staff. Bass or F clef, placed on the fourth line, occasionally on the third, when it is called the baritone clef; used for bass voices and all bass instruments.

Cloche (Fr.) (*closh*). A bell.

Clochette (Fr.) (*closhet'*). A small bell.

Close Harmony. When the sounds forming the chords are drawn together as much as possible.



No. 1, close harmony; No. 2, open harmony.

Coda (It.). "Tail." A passage added after the development of a fugue is finished, or after the "form" of a sonata, rondo, or any other composition has been completed, to produce a more satisfactory close.

Codetta (It.). A short coda.

Cogli stromenti (It.) (*col-yee stro-men'-tee*). With the instruments.

Coi (*coee*), **Col, Coll', Colla, Colle, Collo** (It.). With the.

Col arco. With the bow. Used after the direction "pizzicato."

Col basso. *With the bass.*

Col canto. With the melody.

Col legno (It.) (*col-lane-yo*). With the wood; a direction to strike the strings of the violin with the back of the bow.

Colla parte. With the principal part.

Colla voce. With the voice. In score writing, to save the labor of re-writing a part which is to be played by two or more instruments. It is usual to write the part for one instrument, for instance, the violin, and write the words *col violino* on the staff appropriated to the other instrument.

Colophony. Rosin.

Colorato (It.) (*co-lo-rah'-to*). Florid.

Coloratura (It.) (*co-lo-rah-too'-rah*). Florid passages in vocalization.

Come (It.) (*coh-meh*). As; like.

Come prima (It.) (*coh'-meh pree'-mah*). As at first.

Comes (Lat.) (*co-mes*). The answer to the subject, dux of a fugue. *Dux* means leader; *comes*, follower.

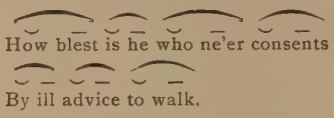
Comma. The difference between a major and a minor tone.

Commodamen'te, Commodet'ta (It.). Quietly; leisurely; without hurry.

Commodo (It.) (*com-mo'-do*). At a convenient rate of motion.

Common Chord. The combination of any sound (called the root) with its major or minor 3d and perfect 5th.

Common Meter, or **Ballad Meter.** A stanza, consisting of alternate lines of four and three iambuses; as,



How blest is he who ne'er consents
By ill advice to walk.

Common Time. Two beats, or any multiple of two beats, in the measure. The signs $\frac{2}{4}$, C, ¢, $\frac{4}{4}$ ($\frac{8}{8}$, $\frac{8}{1}$, $\frac{4}{8}$ rare) indicate simple common time; $\frac{6}{4}$, $\frac{6}{8}$, $\frac{12}{8}$ indicate compound common time, $\frac{6}{4}$ being compounded from two measures of $\frac{3}{4}$; $\frac{6}{8}$ from two measures of $\frac{3}{8}$; and $\frac{12}{8}$ from four measures of $\frac{3}{8}$ time.

Compass. The complete series of sounds that may be produced by a voice or instrument.

Compiacevole (It.) (*com-pea-cheh'-vo-leh*). Agreeable; pleasing; charming.

Complement. The interval which, being added to another, will make an octave. A complementary interval is found by inverting any given interval that is less than an octave.

Composer, Componista (It.), **Componist** or **Komponist** (Ger.). One who composes music.

Composition. The sounds that make up the series of a mixture- or other compound organ-stop.

Composition Pedal or **Knob.** A mechanism worked by the foot or by pressing a button with the finger, which throws on or off certain combinations of stops in the organ.

Compound Intervals. Intervals greater than the octave.

Compound Times. Those formed by adding together several measures of simple time. $\frac{6}{4}$, $\frac{6}{8}$, $\frac{12}{4}$, $\frac{12}{8}$ are compound common, having an even number of beats; $\frac{9}{4}$, $\frac{9}{8}$ are compound triple, having an odd number of beats.

Con (It.). With.

Concert. Any musical performance other than dramatic.

Concertante (It.) (*con-cher-tan'-teh*). A composition in which two or more parts are of equal importance.

Concerted Music. Music for several voices or instruments, or for voices and instruments combined.

Concertina. A small free-reed instrument somewhat like the accordion, but far superior.

Concertmeister (Ger.). Concert master; the leader or conductor of the orchestra.

Concerto (It.) (*con-cher'-to*), **Conzert** (Ger.), **Concert** (Fr.) (*con-sehr*). A composition designed to display the capabilities of one instrument accompanied by others.

Concert spirituel (Fr.) (*con-sehr spiri-too-el*). An association in Paris for the performance of sacred music, vocal and instrumental, founded 1725.

Concertstück (Ger.) (*steek*). Concert piece; concerto.

Concitato (It.) (*con-chee-tah'-to*). Agitated.

Concord. Agreeing. Literally, chording with.

Concordant. (1) Agreeing with. (2, Fr.) The baritone voice.

Conductor. The director or leader of a chorus or orchestra.

Cone Gamba. An organ-stop with bell-shaped top.

Conjunct (Lat., *con-junctus*). Joined together. Adjacent sounds in the scale.

Conjunct Motion. Moving by steps.

Consecutive. Two or more of the same intervals in succession.

Consecutive Fifths. Two voices or parts moving together a fifth apart.

Consecutive Octaves. Two voices or parts moving together an octave apart. Consecutive fifths and octaves are forbidden by the laws of composition, but the prohibition is frequently disregarded by the best writers.

Consequent. The answer to a fugue subject; comes.

Consolante (It.) (*con-so-lan'-teh*). Soothing.

Consonance. Literally, sounding together. Those intervals that enter into the composition of the common chord and its inversions, viz., major and minor 3d and 6th, perfect 4th and 5th, and octave. The major and minor 3d and 6th are called imperfect consonances, being equally consonant, whether major or minor. The perfect 4th, 5th, and 8th are called perfect because any alteration of them produces a dissonance; *i.e.*, an interval that requires resolution. N. B.—This definition of consonance applies only to the modern tempered scale.

Con sordini (It.) (*sor-dee'-nee*). With the mute. (1) In piano music, with soft pedal. (2) Instruments of the violin family: a direction to fasten on the bridge a small implement of wood or metal which has the effect of deadening the tone. (3) Brass instruments: a direction to place a cone-shaped piece of wood covered with leather in the bell, which has the same effect.

Consort. A chest of viols.

Contra (It.). Against (it); in compound words, means an octave below, as contra-bass, contra-fagotto.

Contra danza (It.). Country dance.

Contralto (It.). The lowest female voice, usually called alto.

Contraposaune. A 16- or 32-foot reed-organ stop.

Contrapuntal. Belonging to counterpoint.

Contrapuntist. One skilled in counterpoint, or who writes on the subject of counterpoint.

Contratenor. The highest male voice.

Contra violone (It.) (*vee-o-lo'-neh*), **Contra basse** (Fr.). Double bass.

Countertenor. The developed falsetto. See *Alto.*

Convict of Music. An institution for musical instruction. [Lat., *convictus,* an associate, from *convivere,* to live together.]

Cor (Fr.). A horn.

Cor Anglais (*ong-lay*). English horn; a variety of the hautboy, sounding a fifth lower.

Corale (It.) (*co-rah'-leh*). A choral.

Coranto (It.), **Courante** (Fr.). An old dance in triple time, used as a movement in the suite.

Corda (It.). String. **Una corda, Due corde, Tre corde** or **Tutte corde,** one string, two strings, three strings, all the strings, are directions for the use of the pedal in Grand *p. f.* that shifts the action so as to strike one, two, or all of the strings allotted to each key.

Cornamusa (It.) (*corna-moo-sa*), **Cornemuse** (Fr.) (*corn-moos*). Bagpipe.

Cornet, Cornetto (It.), **Zinke** (Ger.). (1) Originally a coarse-toned instrument of the hautboy family. (2) A compound stop in the organ. (3) **Cornet-à-pistons,** a brass instrument of the trumpet family. (4) Echo cornet, a compound organ-stop with small scale pipes, usually in the swell.

Corno (It.). Horn; the French horn, or Waldhorn (Ger.). The horn of the orchestra.

Cornò alto. High horn. **Corno basso,** low horn.

Corno di bassetto. Basset horn.

Corno di caccia. Hunting horn.

Corno Inglese. Cor Anglais.

Cornopean. Same as *Cornet* (brass); a reed-stop on the organ, 8-foot tone.

Coro (It.). Chorus.

Corona (It.). "Crown"; a pause.

Corrente (It.) (*cor-ren'-teh*). Coranto.

Cotillion (Fr., Cotillon, *co-tee-yon'*). A dance with numerous figures, originally rather lively, now much the same as the Quadrille.

Couched Harp. The spinet.

Count. The beats in the measure are called counts, from the practice of counting the time.

Counterpoint [from Latin *contra-punctus*, against the point]. Notes were originally called points, hence when another set of points were added above or below the points of the theme, they were called counterpoints. In modern use counterpoint may be defined as the art of making two or more parts move together with such freedom that they seem to be independent, each one with a design of its own.

Counter-subject. A theme employed in conjunction with the principal theme in a fugue.

Coup d'archet (Fr.) (*coo d'ar-shay*). A stroke of the bow.

Coupler. A mechanism in the organ, by means of which the keys of two manuals are joined so that the depression of the keys of one causes the depression of the corresponding keys of the other. **Pedal Coupler** joins pedal keys to one of the manuals. **Octave Coupler** causes the octave above or below each key struck to sound either on the same or on another manual.

Couplet (Fr.) (*coo-play*). Stanza; ballad.

Couplet (Eng). A pair of rhyming lines. Two notes played in the time of three of the same denomination.

Cracovienne (Fr.). Polacca.

Cremona. (1) A town in Italy celebrated for its violin makers. (2) A violin made in Cremona. (3) A soft 8-ft. reed-organ stop (corrupted from *Krummhorn*).

Crescendo (It.) (*cray-shen-do*). Abbreviation, *cres.*, sign: to increase in loudness [from It. *crescere*, to increase].

Crescendozug (Ger., hybrid of It. and Ger.). The swell box of the organ.

Croche (Fr.) (*crosh*). An eighth-note.

Crotchet. A quarter-note.

Crowd, Crouth, Crood, Crooth. An ancient string instrument played with a bow. Of celtic origin.

Crush Note. Appoggiatura.

Cue. The last note of one voice or instrument, written in the part of another as a guide to come in.

Cuivre (Fr.). Brass. **Faire cuivrer** (*fare koo-e-vreh*), a direction to produce a rattling, metallic note on the horn by inserting the hand part way in the bell.

Cuvette (Fr.) (*koo-vet'*). The pedal of a harp.

Cyclical Forms. Forms of composition in which one or more themes return in prescribed order, as sonata, rondo, etc.

Cymbals (*Becken*, Ger., *Piatti*, It.). (1) Discs of metal clashed together or struck with drumsticks, used in the orchestra and in military music. (2) A shrill compound stop in the organ.

Czakan (*cha-kan*). A cane flute.

Czardas (*char-dash*). A Hungarian dance with sudden alterations of tempo.

Czimbel (*chim-bel*). A dulcimer strung with wire strings; a national instrument in Hungary.

Czimken (*chim-ken*). A Polish dance.

D

D. Second letter in the natural scale; the third string of the violin; second string of viola or cello; abbreviation of Da or Dal; from D. C., da capo, D. S., dal segno.

Da (It.). From.

Da ballo (It.). In dance style.

Da camera (It.). Chamber music.

Da capella (It.). Church music.

Da capo (It.). From the beginning; abbreviated D. C.

Da capo al fine. From the beginning to the word fine (*fee-neh*), the end, or a double bar with 𝄐 over it.

Da capo al segno (It.) (*sehn-yo*). From beginning to the sign 𝄋

D. C. al 𝄋 e poi la coda. From the beginning to the sign, then the coda.

D. C. senza repetitione (*reh-peh-tee-shee-o-neh*) means the same as above.

D. C. senza replica (It.) (*sehntza reh'-plee-cah*). From the beginning without repeating the parts.

Daina or **Dainos.** A Lithuanian love-song.

Damper. A mechanism in the piano to stop the vibration of the strings when the finger is raised from the key.

Damper Pedal. The miscalled loud pedal, a mechanism controlled by the foot for raising all the dampers at once from the strings.

Danse. A piece of music meant to accompany rhythmical movements of the body.

Darabookka. An Arabian drum.

Dash. (1) A line drawn through a figure (6̸) in figured bass signifies the note must be raised chromatically. (2) A short stroke over a note, signifying it is to be played staccato.

Daumen (Ger.) (*dow-men*). The thumb.

D dur (Ger.). D major.

Début (Fr.) (*deh-boo*). A first appearance.

Decani (Lat.). (1) The dean's side in a cathedral. (2) That part of a choir that occupies the dean's side.

Deceptive Cadence. One in which the dominant chord is not followed by the tonic.

Decima (Lat.). An organ-stop pitched an octave above the tierce.

Deciso (It.) (*deh-chee'-so*). Decided; energetically.

Declamando (It.) (*deh-cla-man'-do*). In declamatory style.

Declamation. The correct enunciation of the words in singing, and their rhetorical accent.

Decres. Abbreviation of **Decrescendo** (It.) (*deh-creh-shen'-do*). To decrease in volume of sound. Sign:

Decuplet. A group of ten notes played in the time of eight of the same denomination.

Defective. The diminished 5th is sometimes so called.

Degree. From one letter to the next, a degree may be a half-tone, minor second; whole tone, major second; tone and a half, augmented second.

Del, Della, Delli, Dello (It.). Of the.

Deliberatamente (It.). Deliberately.

Deliberato (It.) (*deh-lee-beh-rah'-to*), **con.** With deliberation.

Delicatamente (It.). Delicately; gently.

Delicatezza (It.) (*deh-lee-cah-tetza*), **con.** With delicacy.

Delicatissimo (It.). Exceedingly delicate.

Delicato (It.) (*deh-lee-cah-to*). Delicate.

Délie (Fr.) (*deh-lee-a*). The reverse of legato. Literally, not tied.

Delirio (It.) (*deh-lee-reeo*), **con.** With frenzy.

Demi-baton (Fr.) (*deh-mee-bah-tong*). A rest of two measures.

Demi-croche (Fr.) (*crosh*). A sixteenth-note.

Demi-jeu (Fr.) (*zheu*). Half play; a direction in organ-playing to use half the power of the instrument.

Demi-pause (Fr.). A half-rest.

Demi-semi-quaver. Thirty-second note.

Demi-soupir (Fr.) (*soo-peer*). Eighth-rest.

Derivative. Any chord of which the root is not at the bass, an inverted chord.

Des (Ger.). D flat.

Descant or **Discant.** (1) The earliest attempts at adding other parts to a cantus were called descant. (2) The highest part (soprano) in vocal music.

Des dur (Ger.) D♭ major.

Desiderio (It.) (*deh-see-dee'-rio*). Longing.

Des moll (Ger.). D♭ minor.

Dessus (Fr.) (*des-soo*). The soprano part in vocal music.

Destinto (It.) (*deh-stin-to*). Distinct.

Desto (It.). Sprightly; briskly.

Destra (It.). Right. **Mano destra,** the right hand. **Mano sinistra,** the left hand. **Colla destra,** with the right. A direction in piano music.

Détaché (Fr.) (*deh-tash-eh*). Detached; staccato.

Determinato (It.). Resolutely; with determination.

Detto (It.). The same. **Il detto voce,** the same voice.

Development. [In German, *Durchführung.*] (1) The technical name of that part of a sonata form which precedes the return of the principal theme. In the development both the themes are used in fragments mixed with new matter, the object being to present the musical thought in every possible aspect. (2) The working out of a fugue.

Devoto (It.). Devout.

Devozione (It.) (*deh-vot-see-o'-neh*), **con.** With devotion.

Di (It.) (*dee*). By, with, of, for. **Di bravura,** with bravura. Literally, with bravery.

Diana (It.), **Diane** (Fr.). A morning serenade; aubade.

Diapason (Gr.). (1) An octave. (2) An organ-stop of 8-foot pitch, open or closed (stopped). (3) The standard pitch, A = 435 vibrations per second, not yet universally adopted.

Diatonic. (1) The major and minor scales. Strictly speaking, the modern harmonic minor is not purely diatonic, owing to the presence of the augmented 2d between 6 and 7. (2) Diatonic chords, melody, progressive modulation, are those in which no note foreign to the scale in which they are written appears. [From Gr. *dia-teino,* to stretch; referring to the string of the canon or monochord.]

Di colto (It.). Suddenly.

Diecetto (It.) (*dee-chetto*). A composition for ten instruments.

Dièse (Fr.) (*dee-ehs*). A sharp.

Difficile (It.) (*dif-fee'-chee-leh*), **Difficile** (Fr.) (*dif-fi-seel*). Difficult.

Di gala (It.). Merrily.

Diluendo (It.) [*diluere,* to dilute]. Wasting away; decrescendo.

Diminished. (1) Intervals less than minor or perfect. (2) A chord with diminished 5th, as on the 7th of the scale or the 2d of the minor scale. (3) Diminished 7th chord, a chord composed of three superimposed minor thirds, as B D F A♭.

Diminuendo (It.). Same as *Decrescendo.*

Diminution. In canon and fugue, when the answer (comes) is given in notes of half (or less) the value of those in the subject (dux).

Di molto (It.). Very much. **Allegro di molto,** very fast.

Direct. (1) A sign placed at the end of a staff to indicate what is the first note on the next page. (2) In MS. music it indicates that the measure is completed on the next line.

Direct Motion. Both (or all) parts ascending or descending together.

Dis (Ger.). D sharp.

Discant. See *Descant.*

Discord. Cacophony; noise. Used incorrectly for dissonance. Dissonance is musical, but discord never is.

Disinvolto (It.). Free; naturally; easily.

Disjunct Motion. Moving by skips.

Dis moll (Ger.). D♯ minor.

Disperato (It.), **Con disperazione** (*dis-peh-ratz-eo'-neh*). Despairingly; with desperation.

Dispersed Harmony. When the members of the chords are separated widely.

Disposition. (1) Of a chord, the order in which its members are arranged. (2) Of a score, the order in which the instruments are arranged on the page. (3) Of an orchestra, the positions assigned to the different instruments.

Dissonance. An interval, one or both of whose members must move in a certain way to satisfy the ear. All augmented and diminished intervals, seconds, sevenths, and ninths, are dissonances.

Ditty. A short, simple air, originally with words that contained a moral.

Divertimento (It.) (*dee-ver-tee-men'-to*), **Divertissement** (Fr.) (*dee-vehr-tiss-mong*). (1) A pleasing, light entertainment. (2) A composition or arrangement for the piano; this is the most usual meaning. (3) A suite or set with a number of movements for instruments, called also a serenata.

Divisi (It.). Divided; a direction that the string instruments must divide into two masses or more, as may be indicated by the composer.

Divisions. An old name for elaborate variations.

Divoto (It.). See *Devoto.*

D moll (Ger.). D minor.

Do. (1) The first note in the natural scale in Italy; this syllable was substituted for *ut,* the first of the Guidonian syllables; *ut* is still retained in France. (2) In the "movable do" system of singing, the keynote of every scale is called *do.*

Dodecuplet. A group of twelve notes played in the time of eight of the same denomination.

Doigter (Fr.) (*doy-teh*). See *Fingering.*

Dolcan, Dulciana. Soft eight-foot open organ-stop.

Dolce. A stop of same character as dulciana, but softer.

Dolce (It.) (*dol-cheh*). Sweet.

Dolcemente, con dolcezza (It.) (*dol-chet-zah*). With sweetness.

Dolciano, Dolcino (It.), **Dulcan** (Ger.). Dulciana stop.

Dolcissimo (It.) (*dole-chis-see-mo*). As sweet as possible.

Dolente (It.). Afflicted.

Dolentimente (It.). Mournfully; afflictedly.

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Dolzflöte (Ger.) (*dolts-fla-teh*). (1) The old German flute with six holes and one key. (2) A soft eight-foot organ-stop.

Domchor (Ger.) (*dome-kor*). Cathedral choir.

Dominant. (1) The fifth note in the scale. (2) The reciting note in Gregorian chants.

Dominant Chord. The major triad on the fifth of the major or minor scale.

Dominant Key. The usual key in which the second theme of a sonata or rondo in major mode is written.

Dominant Seventh. The seventh over the root added to the dominant chord.

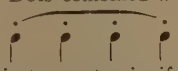
Dopo (It.). After.

Doppio (It.) (*dop'-pee-o*). Double, as *doppio movemento*, double movement, *i. e.*, twice as fast.

Dorian. A Greek or ecclesiastical mode, D to D.

Dot. (1) A dot after a note or rest increases its duration one-half; a second dot increases the duration one-half of the first dot

(2) A dot over a note signifies that it is to be played or sung staccato. (3) Dots combined with slur



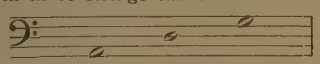
in music for bow instruments signify the notes are to be played with one motion of the bow with a slight stop after each note; in piano music, to raise the arm with stiff wrist after each note or chord and let it fall lightly from the elbow on the next. (4) Dots over a note thus signify that the note is to be repeated by subdivision into as many notes as there are dots.

Double. (1) An old name for *variation*. (2) An octave below the standard pitch, as double bass, double diapason, double bassoon.

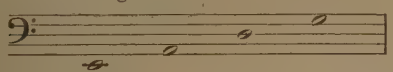
Double (Fr.) (*doobl*). A variation on a minuet; in Italian, *alternativo*.

Double Bar. Two single bars placed close together signifying: (1) The end of a part or piece. (2) A change of key or of time signature. (3) In hymn-tunes the end of a line.

Double Bass. The violone [It., *vee-o-lo-neh*, Fr., *contra-basse*]. The largest of the violin family. Two kinds are in use, one with three strings tuned:



one with four strings tuned:



The pitch is an octave below the written notes.

Double Bassoon. A bassoon of 16-foot pitch.

Double Bourdon. An organ-stop of 32-foot tone.

Double Chant. See *Chant*.

Double Counterpoint. A counterpoint so contrived that it may be placed either above or below the theme, without producing any forbidden intervals. A double counterpoint is said to be at the octave when, if written above the theme, it may be moved down an octave; at the 10th, if it may be moved down a tenth; at the 12th, if it may be moved down a twelfth. Double counterpoint may also be at the 9th and 11th, but the former are much more used.

Double Croche (Fr.) (*doobl crosh*). A sixteenth-note.

Double Diapason. An organ-stop of 16-foot tone.

Double Drum. A drum struck at both ends.

Double Flat, 𝄫, depresses a letter a whole tone.

Double Main (*mang*). Octave-coupler in the organ.

Double Sharp, 𝄪 raises a letter a whole tone.

Double Stop. In violin music, playing simultaneously on two strings.

Double Tonguing. Playing repeated staccato notes on the flute, cornet, etc., by a movement of the point of the tongue against the roof of the mouth.

Double Touche (*toosh*). A contrivance for regulating the depth of the descent of the keys of the harmonium.

Doublette (Fr.) (*doo-blet*). A two-foot organ-stop, the 15th, or a compound stop of two ranks.

Doucement (Fr.) (*doos-mong*). Sweetly, softly.

Doux (Fr.) (*doo*). Sweet, soft.

Down Beat. The first beat in the measure; the principal accent in the measure.

Down Bow. In instruments of the violin family, the motion of the bow from the nut to the point. The sign is ⊓ or ∧. In French the word *tirez* (*tee-reh*), draw.

Doxology [from Greek *doxa*, praise; *lego*, to proclaim]. A short ascription of praise to the Trinity, metrical or otherwise.

Drammatico (It.), **Drammaticamente** (It.). Dramatic; in dramatic style.

Drängend (Ger.) (*drayn'-gent*). Hurrying; accelerating.

Dritta (It.). The right hand.

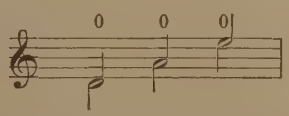
Droit or **Droite** (Fr.) (*droa*). Right hand.

Drone. The pipe that sounds one note continuously in the bagpipe.

Drum. An instrument of percussion, the body hollow, made of wood or metal, one or both ends being covered with vellum or parchment drawn tight by braces. Three kinds of drum are used in modern music: (1) The kettle drum; this is the only one that may be tuned to definite pitch; a pair are generally used in the orchestra, tuned usually to the 1st and 5th of the key. (2) The snare drum or side drum, with parchment at both ends; that at one end is crossed by several thick gut-strings that rattle when the drum is struck on the other end by the pair of drumsticks. (3) The long drum, double drum, *grosse caisse*, used chiefly in military music; struck on both ends.

Drum Slade. A drummer.

Due (It.) (*doo-eh*). Two. **A due,** by two; that is, divide, when marked over a string part in the orchestra; but when over a wind instrument part it means that both of the pair are to play the notes.

Due corde (It.). Two strings. In violin music, means that the note is to be played on the open string and as a stopped note simultaneously. The only notes that may be so played on the violin are:

sometimes signified by writing them as above.

Duet, Duo (Fr.), **Duetto** (It.). A composition for two voices or instruments or for two performers on the piano or organ.

Duettino (It.) (*doo-et-tee'-no*). A little duet.

Dulciana. A soft, open, 8-foot organ-stop; flue pipes; in some foreign organs, a soft reed-stop.

Dulcimer. (1) An instrument consisting of an oblong or square box strung with wire strings, struck by small hammers held in the hands of the performer. (2) A small toy instrument, in which strips of glass or metal are used instead of wire strings, played in the same way.

Duolo (It.) (*doo-o'-lo*), **con doloroso** (It.), **con dolore** (It.) (*do-lo'-reh*). Plaintively; mournfully.

Duple. Double. **Duple Time,** two beats in the measure.

Dur (Ger.) (*duhr*). Literally, hard; major.

Dur (Fr.). Hard; coarse; rough.

Duramente (It.) (*doo-ra-men'-teh*). Roughly.

Durchführung (Ger.) (*doorch'-fee-roonk*). The working out; development of a sonata or fugue. See *Development.*

Durchkomponirt (Ger.) (*doorch'-kom-po-neert*). Composed through. Applied to a song that has a separate setting for each stanza.

Durezza (It.) (*doo-rets'-a*), **con.** With sternness.

Dur-moll Tonart (Ger.). Major-minor scale or mode; a diatonic scale with major 3d and minor 6th.

Duro (It.), **Durante** (It.). Harshly.

Düster (Ger.) (*dees-tehr*). Gloomy; mournful; sad.

Dux (Lat.). Leader; the theme of a fugue.

E

E. (1) The third of the natural major scale, fifth of the natural minor. (2) The first or highest string (chanterelle) of the violin. (3) The fourth or lowest string of the double bass.

E. (It.) (*eh*). And; when the word that follows begins with a vowel, ed (ehd).

Ebollimento or **Ebollizione** (It.) (*eh-bol-litz-ee-o'-neh*). Boiling over; sudden expression of passion.

Ecclesiastical Modes. The scales called also Ambrosian and Gregorian, in which plain song and plain chant are written. They differ from the modern diatonic in the position of the half-tones; their position depends upon the initial note of the scale.

Échelle (Fr.) (*eh-shel*). A scale.

Echo Organ. A set of pipes in old organs enclosed in a box.

Éclat (Fr.) (*eh-claw*). Fire; spirit.

Éclogue or **Eglogue** (Fr.) [from Greek εκλεγο to select]. A pastoral; a poem in which shepherds and shepherdesses are the actors.

École (Fr.) (*eh-cole*). A school or style of music.

Écossais (Fr.) (*ek-cos-seh*) or **Écossaise** (*ek-cos-saze*) (1) In the Scotch style. (2) A lively dance.

Eguale (It.) (*eh-gwah-leh*). Equal; steady.

Egualmente. Equally; steadily.

Einfach (Ger.). Simple. **Einfachheit,** simplicity in construction.

Einfalt (Ger.). Simplicity in manner. **Mit Einfalt,** in a simple, natural manner.

Einleitung (Ger.) (*ein-lei-toonk*). Leading in; introductory.

Einschlafen (Ger.). Diminish in power and movement.

Eis (Ger.) (*eh-is*). E sharp.

Eisteddfod (Welsh) (*ice-steth'-fod*). In modern usage a musical contest for prizes.

Eleganza (It.) (*eh-lee-gantza*), **con.** With grace.

Elegy. A mournful poem commemorating the dead.

Elevato (It.) (*eh-leh-vah'-to*). Elevated; exalted.

Eligiac. In the style of an elegy.

Embellishment. The ornaments of melody, as trill, turn, mordent, etc.

Embouchure (Fr.) (*om-boo-shoor*). (1) The mouth-piece of a wind instrument. (2) The position and management of the mouth and lips of the player.

E moll (Ger.). E minor.

Empater les sons (Fr.) (*om-pahteh leh song*). Literally, to strike the sounds together; to sing extremely legato.

Empfindung (Ger.) (*emp-fin-doonk*). Emotion; passion.

Emporté (Fr.) (*om-por-teh*), **Empressé** (Fr.) (om-pres-*seh*). Hurried; eager; passionate.

Encore (Fr.) (*ong-core*), **Ancora** (It.). Again; a demand for the re-appearance of a performer; the piece sung or played on the re-appearance of the performer.

Energia (It.) (*eh-nur-jea*), **con.** With energy.

Energico, Energicamente, Energisch (Ger.). Energetic; forcibly.

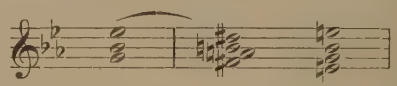
Enfatico (It.) (*en-fa'-tee-ko*). Emphatic; decided.

Enfasi (It.) (*en-fah'-see*), **con.** With emphasis.

Engelstimme (Ger.). Angel voice; a soft organ-stop; vox angelica.

Enharmonic. In modern music, a change of the letter without changing the pitch, as, C♯, D♭.

Enharmonic Modulation. A modulation in which the above change takes place, as,



Ensemble (Fr.) (*ong-sombl*). Together. (1) The union of all the performers. (2) The effect produced by this union. (3) The manner in which a composition for many performers is "put together."

Entr'acte (Fr.) (*on-trakt*). Between the acts; music performed between the acts of a drama.

Entrata (It.), **Entrée** (Fr.). Entry; introduction, prelude; the first movement of a serenata.

Entschlossen (Ger.) (*ent-shlos-sen*). Resolute; resolutely.

Entusiasmo (It.) (*ehn-too'-see-as-mo*), **con.** With enthusiasm.

Eolian or **Æolian.** (1) One of the Greek and ecclesiastical scales. (2) A species of harp played on by the wind.

Epicède (Fr.), **Epecedio** (It.) (*ep-ee-cheh'-dee-o*). A funeral dirge.

Epinette (Fr.). A spinet.

Episode. The parts of a fugue that intervene between the repetitions of the main theme.

Epithalamium. A wedding song.

E poi (It.). And then; after.

Equabile (It.) (*eh-qua-bee-leh*). Equal; steady.

Equabilmente. Equally; steadily.

Equal Voices. A composition is said to be for equal voices when written for men's only or women's only. When male and female voices are combined the music is said to be for mixed voices.

Equisono (It.). Equal sounding; unison.

Equivocal Chords. Dissonant chords that are common to two or more keys, or that may be enharmonically substituted for each other, as the diminished 5th chord, diminished 7th chord, and augmented 6th chord.

Ergriffen (Ger.). Affected; moved.

Ergriffenheit. Emotion.

Erhaben (Ger.). Lofty; sublime.

Erhabenheit. Sublimity.

Ermattet (Ger.). Exhausted.

Ernst (Ger.). Earnest; serious.

Eroica (It.) (*eh-ro'-ee-ka*). Heroic.

Erotic. Amatory. [Gr. *Eros,* Cupid.]

Ersterbend (Ger.). Dying away; morendo.

Es (Ger.). E flat.

Es dur (Ger.). E flat major.

Es-es (Ger.). E double flat.

Es moll (Ger.). E flat minor.

Espagnuolo (It.) (*ehs-pan-yu-olo*). In Spanish style.

Espirando (It.). Dying away.

Espressione (It.) (*ehs-pres-see-o-neh*), **con.** With expression.

Espressivo (It.). Expressive.

Essential Dissonances. Those that are added to the dominant chord. Auxiliary notes of all kinds are non-essential dissonances.

Essential Harmony. The harmony independent of all melodic ornaments, etc.

Estinguendo (It.) (*es-tin-guen-do*). As soft as possible.

Estinto (It.). Dying away; extinguishing.

Estravaganza (It.) (*es-trah-vah-gantza*). A fanciful composition; a burlesque.

Étoffé (Fr.). Full; sonorous.

Étouffée (Fr.). Stifled; damped.

Étude (Fr.) (*eh-tood*). A study, lesson.

Etwas (Ger.) (*et-vos*). Somewhat; as, **etwas langsam,** somewhat slow.

Euphonium. A large brass instrument of the saxhorn family, used in military bands; a free reed-stop in the organ, sixteen-foot pitch.

Euphony [Gr., *eu,* good; *phone,* sound]. Well-sounding; agreeable.

Exercise. (1) A study designed to overcome some special difficulty or strengthen special muscles. (2) A lesson in harmony, counterpoint, or composition. (3) A composition written as a thesis for the obtaining of a degree.

Exposition. The giving out of the subject and answer by all the voices in turn at the opening of a fugue.

Expression. The performance of music in such a manner as to bring out all its emotional and intellectual content. Intelligent, appreciative performance.

Expression (Fr.). The name of a harmonium stop.

Extempore (Lat.) (*ex-tem'-po-reh*). The gift of playing music composed as it is played.

Extemporize. To play unpremeditated music.

Extended Harmony. Reverse of close harmony, *q. v.*

Extension. (1) Violin playing, to reach with the fourth or first finger beyond the "position" in which the hand may be. (2) In piano music, spreading the hand beyond the "five-finger" position.

Extraneous Modulation. A modulation to a distant or non-related key.

Extreme. The outside parts, as bass and soprano.

Extreme. Used by many writers on harmony in the sense of augmented; as, extreme 2d or 5th or 6th.

F

F. The fourth or subdominant of the natural major or minor scale.

Fa. The fourth of the syllables adopted by Guido, called the Aretinian syllables. In "Movable Do" system the fourth of any scale.

Fa bemol (Fr.). F flat.

Fa burden, Falso bordone (It.), **Faux bourdon** (Fr.). (1) An ancient species of harmonization, consisting of thirds or sixths added to the cantus. (2) A drone bass like a bagpipe.

Facile (Fr.) (*fa-seel*), **Facile** (It.) (*fah-chee-leh*). Easy.

Facilment (Fr.) (*fa-seel-mong*), **Facilmente** (It.) (*fa-cheel-men-teh*). Easily; fluently.

Facilité (Fr.). Made easy; an easy version of a difficult passage.

Facture (Fr.) (*fak-toor*), **Fattura** (It.) (*fat-too-rah*). Literally, the making. The construction of a piece of music; the scale of organ-pipes.

Fa dièse (Fr.) (*dee-ehs*). F sharp.

Fagotto (It.), **Fagott** (Ger.). Bassoon (so called from its resemblance to a fagot or bundle of sticks). A double-reed instrument of great utility in the orchestra. Compass, three octaves (and over) from B♭ below the bass staff.

Fagottone (It.) (*fag-got-to'-neh*). Double bassoon.

Faible (Fr.) (*faybl*). Weak. **Temps faible,** weak beat.

False Cadence. A deceptive cadence.

False Fifth. A name for the diminished fifth.

False Relation. When a note sounded by one voice is given in the next chord, altered by ♯, ♭, or ♮, by another voice, thus:

Falsetto (It.). The highest register of the voice.

Fandango (Sp.). A rapid dance in triple time.

Fanfare (Fr.), **Fanfara** (It.). A brilliant trumpet call or flourish; a brass band.

Fantasia (It.), **Fantasie** (Ger.), **Fantaisie** (Fr.). A composition that is not in any of the regular forms; often used of pianoforte arrangements of themes from operas.

Fantasia, Free. The name sometimes given to that part of a sonata that comes after the double bar; the Durchführung or development.

Fantasiren (Ger.) (*fan-ta-see-ren*). To improvise.

Fantastico (It.), **Fantastique** (Fr.). Fantastic; grotesque.

Farandola (It.), **Farandole** or **Farandoule** (Fr.). A rapid dance in $\frac{6}{8}$ time, Southern France and Italy.

Fascia (It.) (*fashiah*). A tie. ⁀

F Clef. See *Clef.*

F dur (Ger.). F major.

Feierlich (Ger.). Festal; pompously; grandly; solemnly.

Feld (Ger.). Field; open air.

Feldmusik. Military music.

Feldton. The key of E♭, often used for military band music.

Fermata (It.) [from *fermare,* to stay]. A pause. 𝄐 A cessation of accompaniment and time, while a soloist executes a cadenza.

Fermato, Fermamente (It.). Firmly; decidedly.

Feroce (It.) (*feh-ro'-cheh*). Wild; fierce.

Ferocita (It.) (*feh-ro'-chee-tah*), **con.** With ferocity.

Fertig (Ger.). Quick; ready; nimble.

Fertigkeit. Dexterity; technical skill.

Fervente (It.) (*fer-ven'-teh*). Fervent; vehement.

Fes (Ger.). F flat.

Fest (Ger.). Festival.

Fest (Ger.). Fast; fixed.

Fester Gesang. Canto firmo.

Festgesang. Festival song.

Festivo (It.) (*fes-tee'-vo*). Festive; solemn.

Festivamen'te (It.). Festively; solemnly.

Festivita (It.) (*fes-tee'-vee-ta*), **con.** With joyfulness.

Festo'so (It.). Gay; joyful.

Feuer (Ger.) (*foy-ehr*). Fire.

Feuerig (Ger.). Fiery.

F-holes. The openings in the belly of instruments of the violin family; so called from their shape, *f.*

Fiacco (It.) (*fee-ak'-ko*). Weak; faint.

Fiasco (It.). A failure; breakdown. Literally, "a flask."

Fiato (It.). Breath.

Fiddle. This word and "violin" both come from the same root—the Low Latin word *vitula.*

Fidicen (Lat.). A harp or lute player. [From Lat. *fides,* a string, and *cano,* to sing.]

Fidicinal. A general term for string instruments.

Fiedel (Ger.). Fiddle.

Fieramente (It.). Proudly; fiercely.

Fiero (It.) (*fee-eh-ro*), **Fier** (Fr.) (*fee-eh*), proud; fierce.

Fife, Fifre (Fr.), **Piffero** (It.), **Querpfeife** (Ger.) (*kvehr-pfei-feh*). A small flute without keys, an octave higher than the flute, used in conjunction with drums for military purposes.

Fifteenth. An organ-stop of 2-foot pitch; open; metal.

Fifth. (1) An interval which includes five letters. (2) The dominant of the key.

Figure. (1) A form of accompaniment maintained without change. (2) A repeated melodic phrase. (3) Sequence.

Figured Bass, Basso figurato (It.), **Basse chiffre** (Fr.). A bass with figures over it (or under it) to indicate the chord each note is to bear. Invented as a species of musical shorthand it has been retained as a means of teaching harmony, although its warmest advocates admit its inadequacy to the indication of modern harmony.

Filar la voce (It.) (*feelar-la-vocheh*), **Filer la voix** (Fr.) (*fee-leh-la-voa*). To sustain a sound with even tone. Literally, to spin like a thread.

Fin (Fr.) (*fang*), **Fine** (It.) (*fee-neh*). End.

Finale (It.) (*fee-nah-leh*). Final. The last movement of a sonata or symphony or of the act of an opera.

Fingerboard. The upper side of the neck of string instruments, generally a thin strip of ebony against which the strings are pressed by the fingers of the left hand.

Fingering. The art of using the fingers systematically when playing an instrument; the marks or figures that indicate what fingers are to be used.

Fingersetzung (Ger.). Fingering.

Finto (It.). A feint; applied to a deceptive cadence.

Fioretto (It.) (*fee-o-ret-to*). An ornament.

Fiorito (It.) (*fee-o-ree-to*). Florid.

Fiorituri (It.) (*fee-o-ree-too-ree*). Embellishments; florid passages.

Fis (Ger.). F sharp. **Fisfis** or **Fisis,** F double sharp.

Fis dur. F sharp major.

Fis moll. F sharp minor.

Fixed Do. *Do* used as the name of C; movable *do* is *do* used as the keynote of any scale.

Flageolet. A small pipe blown at the end; an organ-stop of 2-foot pitch.

Flageolet Tones. The harmonic sounds produced by touching lightly the strings of violin, etc.

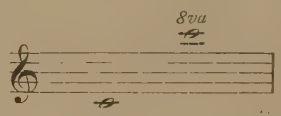
Flat. The sign of depression (♭) lowers the letter a half-tone.

Flautando, flautato (It.). Flute-like; in violin playing, a direction to produce flageolet tones.

Flautino (It.) (*flau-tee-no*). A small flute; a piccolo.

Flue Stops. Organ stops, the pipes of which are constructed on the same principle as the whistle or flageolet.

Flute, Flauto (It.) (*flau-to*), **Flöte** (Ger.) (*flateh*). (1) One of the most important of orchestral instruments; a cylindrical tube blown at a hole in the side called the embouchure. The modern flute, constructed on the Boehm system, is very much superior to the older instrument in both tone and tune. Its compass is from



(2) An organ-stop of 8 or 4-foot pitch; in French organs a general name for flue stops. There are many varieties of the flute, the major part of which are now either obsolete or used as names for organ-stops, as flauto traverso, transvere or German flute; flute d'amour, a soft-toned organ-stop; flute harmonique, an overblown flute, the pipe of which is twice the length necessary to produce the sound it is made to give.

F moll. F minor.

Foco (It.). Fire. **Con foco** or **fuoco,** with fire.

Focoso. Fiery; ardently.

Foglietto (It.) (*fol-yet'-to*). The part used by the leader of the violins in the orchestra, containing cues, etc., of the other instruments, sometimes used by the conductor in place of a score.

Fois (Fr.) (*foa*). Time; as, **première fois,** first time.

Folia (Sp.), **Follia** (It.). A Spanish dance. Elaborate variations are called Follias de España, in French, Folies de'Espagne, meaning "follies of Spain" (a pun on the word folia), which has become a proverbial expression for trifles.

Fonds d'orgue (Fr.) (*fond-dorg*). The 8-foot flue-stops of the organ. The foundation stops.

Foot. (1) A poetic measure or meter. (2) A drone bass. (3) The unit used in determining the pitch of organ pipes, the standard being 8-foot C,

the lowest note on the manuals of the modern organ. An open pipe must be eight feet long to produce this sound, if closed it must be four feet long. Applied to other instruments it signifies that their pitch corresponds with that of the organ diapasons, that is, it is the same as the written note. All the violin family are of 8-foot pitch, except the double bass, which is of 16-foot pitch, that is, the notes sound an octave lower than written. The flute, hautboy, clarionet, and bassoon are also of 8-foot pitch. Of brass

instruments, the cornets, trumpets, and trombones are of 8-foot pitch. The high horn in C is 8-foot, but the low horn in C is 16-foot pitch.

Forlana (It.), **Fourlane** (Fr.) (*foor-lan*). A dance somewhat similar to the tarantella.

Form. The number, order, and key relation of the several themes that are combined to make an extended composition, such as the sonata, rondo, symphony, concerto, etc. The lyric or dance form is the germ from which all varieties of instrumental music have been developed. The simplest form of lyric melody may be thus divided: Motive, two measures; Section, two motives; Phrase, two sections; Sentence, two phrases; Period, two sentences, making sixteen measures in all. The lyric form may be extended indefinitely by the addition of new periods in related keys. One of the most usual is the addition of a new period in the key of the dominant, subdominant, or relative minor, followed by a repetition of the first period. This is called the Aria Form. It was formerly largely used in vocal music, and is now one of the most usual forms for the lighter class of piano music. The following outlines of sonata and rondo forms give their main characteristics. The sonata form is the form of the symphony, and of the trio, quartet, etc., for string instruments, or for piano with strings, or other instruments. The same is the case with the rondo; this form is frequently used for the final movement.

Outline of Sonata Form in Major Key

FIRST HALF.

1st Theme.	2d Theme.
Tonic key.	Dominant key.

SECOND HALF

	1st Theme.	2d Theme.
Development.	Tonic key.	Tonic key.

Sonata in Minor Key

FIRST HALF

1st Theme.	2d Theme.
Tonic.	Relative major.

SECOND HALF

	1st Theme.	2d Theme.
Development.	Tonic.	Parallel major.

Frequent deviations may be found from the foregoing schemes. The intervals between the themes are filled with transition passages or modulations so constructed as to heighten the effect of the theme that follows; codas are frequently added after both appearances of the second theme.

Modern Rondo Form, Major Key

FIRST HALF

1st Theme.	2d Theme.	1st Theme.
Tonic.	Dominant.	Tonic.

SECOND HALF

3d Theme.	1st Theme.	2d Theme.	Coda.
Sub-dom.	Tonic.	Tonic.	Made from 1st
Rel. minor.			theme or all
Parallel minor.			the themes.

For an example of this kind see Beethoven's No. 2 Sonata of the three dedicated to Haydn, last movement.

Same Form of Rondo in Minor Key

FIRST HALF

1st Theme.	2d Theme.	1st Theme.
Tonic.	Relative major.	Tonic.

SECOND HALF

3d Theme.	1st Theme.	2d Theme.	Coda.
Sub-dom. and relative major.	Tonic.	Tonic major.	Minor.

See last movement of Sonata Pathétique—Beethoven.

Forte (It.) (*for-teh*). Loud. **Fort** (Fr.), **Stark** (Ger.). **Meno forte,** less loud. **Mezzo forte** (M. F.), half loud. **Piu forte,** louder. **Poco forte,** a little loud; rather loud. **Sempre forte,** always loud. **Forte stop,** a mechanism worked by the feet or the knee, or a draw-stop, by means of which the whole power of the harmonium, organ, etc., may be put on at once.

Forte possibile (It.) (*pos-see'-bee-leh*), **Fortissimo** (It.). Loud as possible.

Fortemente (It.). Loudly; forcibly.

Forza (It.) (*fortza*), **con.** With force.

Forzando (It.) (*fortzando*). Forcing the sound; emphasizing a certain note, indicated by <, ∧, *fz, sfz.*

Forzato (It.) (*fortzato*), **Sforzando, Sforzato.** All have the same meaning as *Forzando.*

Fourniture (Fr.). A mixture-stop in the organ.

Fourth. (1) An interval embracing four letters. (2) The subdominant of the scale.

Française (Fr.) (*frong-says*). A dance in triple time.

Francamente (It.) (*frank-a-men'-teh*). Frankly; boldly.

Franchezza (It.) (*fran-ket'-za*), **Franchise** (Fr.) (*frong-shees*). Freedom; confidence.

Freddamente (It.). Frigidly; coldly.

Fredezza (It.) (*freh-det'-za*), **con.** With coldness.

Free Fugue. One that does not conform to strict rules.

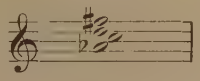
Free Parts. Parts added to a canon or fugue that take no part in its development.

Free Reed. See *Reed.*

Free Style. The reverse of strict contrapuntal style.

French Horn. See *Horn.*

French Sixth. The augmented 6th with augmented 4th and major 3d.



French Violin Clef. The G clef on the first line (obsolete).

Frets. Pieces of wood, metal, or ivory, set across the fingerboard of some string instruments, raised slightly above its surfaces, to regulate the pitch of the sounds; the finger is pressed on the string behind the fret, which then acts as a bridge.

Fretta (It.), **con.** With haste; hurry.

Frisch (Ger.). Fresh; lively.

Fröhlich (Ger.). Gay; cheerful.

Frottola (It.). A comic ballad.

Fuga, Fugue (It.), **Fuge** (Ger.) (*foo-geh*). [From Lat., *fuga,* flight]. The parts seeming to fly one after another; the highest development of counterpoint; a composition developed from one or two (sometimes three) short themes, according to the laws of imitation. The chief elements of a fugue are: (1) Subject, or theme. (2) Answer, imitation of theme at 5th above or below. (3) Counter-subject, an additional theme which accompanies the main theme. (4) Episodes; these connect the various repetitions of the theme together. (5) Organ point, generally used before the stretto. (6) Stretto, a drawing together of the subject and answer; the stretto is often written on an organ point. (7) Coda, the free ending after the development is completed. Although all these things enter into the fugue, it is not necessary that every fugue should include all of them. There are many varieties of fugue now happily relegated to the limbo of musical antiquities. The most important are the Real fugue, in which the subject and answer are identical, and the Tonal fugue, in which an alteration must be made in the theme to prevent its going out of the key. In the tonal fugue the subject moves from the tonic to the dominant, or the reverse. The answer must move from dominant to tonic, or the reverse.

Fugara. An open, metal pipe organ-stop, generally of 4-foot tone.

Fugato. In fugue style. **Aria fugato,** a song with fugue-like accompaniment.

Fughetto (It.). A slightly developed fugue.

Full Cadence. Perfect cadence. See *Cadence.*

Fundamental. The generator or root of a chord.

Fundamental Bass. The roots of the harmonics on which a piece is constructed.

Fundamental Position. A chord with its root at the bass.

Funèbre (Fr.) (*foo-nebr*), **Funerale** (It.) (*foo-neh-rah'-leh*). Funereal; dirge-like.

Fuoco (It.) (*foo-o'ko*). Fire. **Con fuoco,** with fire.

Furia (It.) (*foo'-re-ah*), **con.** With fury.

Furibundo (It.), **Furioso** (It.). Furiously; savagely.

Furlano (It.). See *Forlana.*

Furniture. A mixture-stop in the organ.

Furore (It.) (*foo-ro'-reh*), **con.** With fury; passion.

Fusée (Fr.) (*foo-seh'*). A slide from one sound to another.

G

G. (1) The fifth or dominant of the natural major scale. (2) The fourth or lowest string of the violin. (3) The third string of the viola and violoncello; the first string of the double bass. (4) The letter represented by the G or treble clef. (5) Abbreviation for Gauche (Fr.) (*gawsh*), left

Gagliarda (It.) (*gal-yar-dah*), **Gailliarde** (Fr.) (*gah-yard*). A favorite dance in $\frac{3}{4}$ time resembling the minuet.

Gai (Fr.) (*gay*), **Gaja** (It.) (*gayah*), **Gaiment** (Fr.) (*gay-mong*), **Gajamente** (It.) (*gay-a-men-teh*). Gay; merry; gaily; merrily.

Gala (It.) (*gah-lah*), **di gala.** Finely; bravely. Literally, in fine array.

Galamment (Fr.) (*gal-lah-mong*), **Galantemente** (It.) (*galant-eh-men-teh*). Gracefully; freely; gallantly.

Galant (Ger.) (*gah-lant'*), **Galante** (Fr.) (*gah-longt*), **Galante** (It.) (*gah-lan-teh*). Free; gallant; graceful.

Galliard. See *Gagliarda.*

Galop (Fr.) (*gah-lo*), **Galopade** (Fr.) (*galo-pahd*), **Galopp** (Ger.). A rapid, lively dance in $\frac{2}{4}$ time.

Gamba (It.) [the leg]. (1) See *Viol di gamba.* (2) An organ-stop of eight-foot pitch; in German, **Gambenstimme.**

Gamma. The Greek letter g, Γ; in ancient music the letter G, first line bass staff; in the hexachord system this sound was called *gamma ut,* from whence comes gamut, a scale.

Gamme (Fr.) (*gahm*). A scale; gamut.

Gang (Ger.). Passage.

Ganz (Ger.) (*gants*). Whole. **Ganze Note,** whole note.

Garbo (It.). Gracefulness; refinement.

Gassenhauer (Ger.) (*gas-sen-how-er*). Lit., running the streets. An old dance in $\frac{2}{4}$ time.

Gauche (Fr.) (*gawsh*). Left. **Main gauche,** left hand.

Gavot (Fr.) (*gah-vo*), **Gavotte** (*gah-vot*), **Gavotta** (It.). An old dance in $\frac{4}{4}$ time; lively, yet dignified. Frequently introduced in the suite.

G Clef. See *Clef.*

Gedeckt (Ger.) [from *decken,* to close]. Closed; the stopped diapason.

Gedehnt (Ger.). Slow; stately.

Gedicht (Ger.). Poem.

Gefallen (Ger.) (*geh-fal-len*). Pleasure. **Nach Gefallen,** at will. See **Bene placito** and **A piacere.**

Gefühl (Ger.) (*geh-feel*). Feeling. **Mit Gefühl,** with feeling.

Gegensatz (Ger.) (*geh-gen-sats*). The second theme in a sonata. Lit., the against or contrary theme; **Hauptsatz** being the chief or principal theme.

Gehalten (Ger.) (*geh-hal-ten*). Held; sustained; tenuto.

Gehend (Ger.) (*geh-end*). Going; andante. **Etwas gehend** (con moto), with motion.

Geige (Ger.). Fiddle; violin.

Geigenprincipal. An organ-stop of 8- or 4-foot pitch.

Geist (Ger.). Spirit; mind; genius.

Geistlich (Ger.). Sacred; spiritual.

Gelassen (Ger.). Tranquil; calm.

Gemächlich (Ger.) (*geh-mehch-lich*). Easy; convenient.

Gemächlich commodo. Not too fast.

Gemässigt (Ger.) (*geh-mehs-sicht*). Moderate. Lit., measured.

Gemshorn. An 8- or 4-foot organ-stop with horn-like tone.

Gemüth (Ger.) (*geh-meet'*). Heart; soul; feeling.

Gemüthlich (Ger.). Feelingly; heartily.

Generator. Root; fundamental of a chord.

Genere (It.) (*je'-neh-reh*), **Genre** (Fr.) (*zhongr*). Style; class; mode.

Generoso (It.) (*jeh-neh-ro'-so*). Freely; frankly.

Gentille (Fr.) (*zhong-til*), **Gentile** (It.) (*jen-tee-leh*). Graceful; delicate. **Con gentilezza** (It.) (*jen-tee-letza*), with grace; nobility.

German Flute. See *Flute.*

German Sixth. See *Augmented Sixth.*

Ges (Ger.). G flat.

Gesang (Ger.) (*geh-zong'*). Singing [from *singen,* to sing]; song; melody; air.

Gesangverein (Ger.). Singing society.

Geschmack (Ger.). Taste. **Mit Geschmack,** with taste. **Geschmackvoll,** tasteful.

Geschwind (Ger.) (*geh-shvint'*). Fast; presto.

Gesteigert (Ger.). Raised; exalted in volume; louder; crescendo.

Getragen (Ger.) (*geh-tra-gen*). Sustained. [*Tragen,* to bear up.] Sostenuto.

Gezogen (Ger.) (*geh-tso-gen*) [from *ziehen,* to drawl]. Prolonged; sustained.

Ghazel or **Gazel.** A short Persian poem, used by Hiller as a name for short pianoforte pieces, in which a simple theme constantly occurs.

Ghiribizzo (It.) (*gee-ree-bitz'-o*). Whim; grotesque.

Giga (It.). Jig; a rapid dance in $\frac{6}{8}$ time, used as the final movement in the suite, where it is often developed in fugue form.

Giochevole (It.) (*jee-o-keh'-vo-leh*), **Giocondosa** (It.) (*jee-o-kon-do-sah*), **Giocoso** (It.) (*jee-o-co-so*), **Giocondezza** (It.) (*jee-o-con-detza*). Joyful; merry; sportive; happy; mirthful.

Gioja (It.) (*jeo-ya*), **con.** With joy.

Giojante (It.) (*jeo-yan-teh*), **Giojosamente** (It.) (*jeo-yos-a-men-teh*), **Giojoso** (It.) (*jeo-yo-so*). Joyous; mirthfully.

Gioviale (It.) (*jeo-ve-ah'-leh*). Jovial.

Giovialita (It.) (*jeo-vee-ah-lee-tah*), **con.** With joviality.

Gis (Ger.) (*ghiss*). G sharp.

Giubilio (It.) (*jew-bee-leo*). Jubilation.

Giubilioso (It.) (*jew-bee-lee-oso*). Jubilant.

Giustezza (It.) (*jews-tet'-za*), **con.** With exactness.

Giusto (It.) (*jewsto*). Strict; exact.

Glee. A composition for three or more voices without accompaniment. The glee differs from the madrigal, its predecessor, in being constructed more on the harmonic than the contrapuntal system; *i. e.*, admits dominant, dissonances, and second inversions. The glee is the most distinctive form of English music. The best glees belong to the eighteenth century and the first part of the nineteenth. They have been largely superseded by the part song.

Gli (It.) (*lee*). The.

Glide. (1) To connect two sounds by sliding. (2) A modern variety of the waltz.

Glissando, Glissato, Glissicato, Glissicando (It.). To play a scale on the pianoforte by drawing the finger along the keys. Only possible in the natural scale. In violin playing, to slide the finger rapidly from one "stop" to the next.

Glissé (Fr.) (*glis-seh*). See *Glissando.*

Glisser (Fr.) (*glis-seh*). To slide.

Glockenspiel (Ger.). Bell play; a small instrument consisting of bells tuned to the diatonic scale, played by small hammers or by means of a keyboard. Steel bars are sometimes used in place of bells.

Cong. A pulsatile instrument consisting of a disc of bronze, struck with drumstick with soft head.

Gorgheggi (It.) (*gor-ghed'-je*). Florid singing, with runs, trills, etc.

Grace Note. See *Appoggiatura.*

Graces. The ornamental notes first used in harpsichord playing; they are now nearly all obsolete, or if used are written in full by the composer.

Gracieux (Fr.) (*grah-see-oo*), **Gracieuse** (Fr.) (*grah-see-oos*), **Gracile** (It.) (*gra-chee-leh*). Graceful; delicate.

Gradevole (It.) (*grah-deh'-vo-leh*). Grateful.

Graduellement (It.) (*grah-doo-el-mong*). By degrees.

Gran cassa (It.). Great drum; long drum.

Gran gusto (It.), **con.** With grand expression.

Gran tamburo (It.). The big drum.

Grand barré (Fr.). See *Barré.*

Grand jeu (Fr.) (*zheu*), **Grand choeur** (*koor*). Full organ.

Grand Piano. Properly, the long, wing-shaped pianoforte with keyboard at the wide end; commonly applied to all varieties of piano with three strings to each key.

Grande orgue (Fr.) (*org*). Great organ.

Grandezza (It.) (*gran-det'-za*), **con.** With grandeur.

Grandioso (It.) (*gran-de-o'-so*). Grandly.

Grave [Fr., *grahv;* It., *grah-veh*]. Deep in pitch; slow; solemn.

Gravecembalum (Lat.), **Gravicembalo** (It.), (*gra-vee-chem-balo*). The harpsichord.

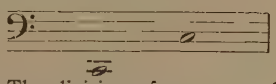
Gravement (Fr.) (*grahv-mong*), **Gravemente** (It.) (*grah-veh-men-teh*). Slowly; seriously.

Gravita (It.) (*gra-vee-tah*), **con.** With dignity.

Grazia (It.) (*grat-se-a*), **con.** With grace; elegance.

Grazioso (It.) (*grat-si-oso*), **Graziosamente** (*grat-si-osa-men-teh*). Gracefully; elegantly.

Great Octave. The sounds from



Great Organ. The division of an organ that contains the most powerful stops, generally operated by the middle keyboard or manual, the upper being the swell organ, the lower the choir organ.

Greater. Major; as, greater third, greater sixth. In old usage the major scale is called the scale with the greater third.

Greek Music. The Greek system of music is still a subject of controversy about which very little is known. The best attempts at its elucidation may be found in Chappel's "History of Music" and Munro's "Greek Music." Its interest is purely antiquarian.

Gregorian Chant. See *Plain Song.*

Groppo (It.), **Groppetto** (It.). A turn; a group.

Grosse (Ger.) (*gros-seh*). (1) Major, applies to intervals. (2) Great or grand, as, grosse Sonate. (3) An octave below standard pitch, as, grosse Nazard, an organ-stop an octave below the twelfth.

Grosse-caisse, Gros tambour. See *Drum.*

Grosso (It.). Great; large; as, grosso concerto.

Grottesco (It.) (*grot-tes'-ko*). Grotesque; comic.

Ground Bass. A bass of four or eight bars, constantly repeated, each time with varied melody and harmony. The ground bass was generally used as the basis of the chaconne and passacaglio.

Group. (1) A series of rapid notes grouped together. (2) One of the divisions of the orchestra, as string group, brass group, wood group.

Gruppo, Grupetto. See *Groppo, Groppetto.*

G-Schlüssel (Ger.) (*gay-shlues-sel*). G clef.

Guaracha (Sp.) (*gwah-rah'-chah*). A lively Spanish dance in triple time.

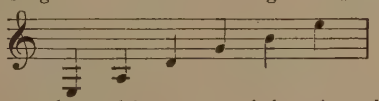
Guerriero (It.) (*gwer-reeh'-ro*). Martial; warlike.

Guida (It.) (*gwee-dah*). Guide; the subject of a canon or fugue.

Guidonian Hand. A diagram consisting of a hand, with the syllables written on the tips of the fingers and on the joints, intended to assist in memorizing the hexachord scales.

Guidonian Syllables. The syllables applied by Guido to the notes of the hexachord, *ut, re, mi, fa, sol, la.* When the octave scale was adopted *si* was added for the seventh note; *ut* was changed to *do* as a better syllable for vocalizing.

Guitar. A string instrument with fretted fingerboard, played by plucking the strings with the fingers of the right hand, one of the oldest and most widespread of instruments. It probably originated in Persia, where it is called *tar* or *si-tar,* passed from thence to Greece, and to the rest of Europe and North Africa. The guitar now in general use is called the Spanish guitar. It has six strings tuned thus:



but their actual sound is an octave below the written notes.

Gusto (It.), **con.** With taste.

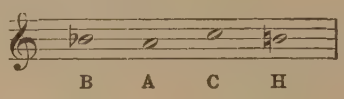
Gustoso. Tastefully.

Gut. The material (sheep's entrails) of which violin, guitar, and other strings are made, commonly called catgut.

Gut (Ger.) (*goot*). Good. **Guter Taktteil,** lit., good bar part; the accented part of the bar.

H

H. Abbreviation for Hand. **Hah** (Ger.), the note B♮, B♭ being called B (*bay*). It is this system of nomenclature that makes possible the fugues on the name of Bach, written by Bach, Schumann, and others:



Hackbrett (Ger.). Literally, chopping-board. The dulcimer.

Halb (Ger.) (*halp*). Half.

Halbe Cadenz (Ger.). Half cadence.

Halbe Note. Half-note.

Halber Ton. Half-tone.

Half-Note. 𝅗𝅥

Half-Rest. 𝄼

Half-Shift. On the violin, the position of the hand between the open position and the first shift.

Half-Step. Half-tone.

Half-Tone. The smallest interval in modern music.

Hallelujah (Heb.). The Greek form **Alleluia** is often used. "Praise ye Jehovah."

Halling. A Norwegian dance in triple time.

Hals (Ger.). Neck, as of violin, guitar, etc.

Hammerklavier (Ger.). A name for the P. F. (used by Beethoven in the great sonata, Op. 106).

Hanacca. A Moravian dance in $\frac{3}{4}$ time, somewhat like the polonaise.

Hardiment (Fr.) (*har-dee-mong*). Boldly.

Harmonic Flute. See *Flute.*

Harmonic Scale. The series of natural harmonics; the scale of all brass instruments without valves or pistons.

Harmonic Stops. Organ-stops with pipes of twice the standard length pierced with a small hole at the middle, causing them to sound the first overtone instead of the sound that the whole length would produce.

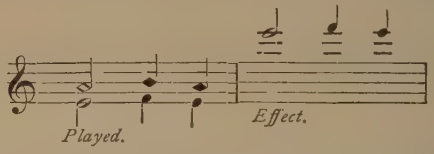
Harmonica. (1) An instrument invented by Benjamin Franklin, the sounds of which were produced from glass bowls. (2) An instrument consisting of plates of glass struck by hammers. (3) A mixture-stop in the organ.

Harmonici (Lat.) (*har-mon'-i-see*). The followers of Aristoxenus, as opposed to the **Canonici** (*ka-non-i-see*), the followers of Pythagoras. The former taught that music was governed by its appeal to the ear, the latter that it was a matter for mathematical and arithmetical study only.

Harmonicon. A toy instrument with free reeds, blown by the mouth.

Harmonics, Overtones, Partial Tones. (1) The sounds produced by the division of a vibrating body into equal parts; it is upon the presence or absence and relative intensity of the overtones that the quality of the sound depends. Open pipes, strings, brass instruments, and instruments with double reed (bassoon and hautboy) give the following series:

	1	2	3	4	5	6	7	8	9	
C	C	G	C	E	G	B♭	C	D	E,	etc.
generator	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{7}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{10}$	

Closed pipes and beating reeds (clarionet) omit all the even numbers in this series. (2) The sounds produced on the violin by touching the string lightly at one of the points of division; those produced by thus touching the open string are called natural harmonics. Artificial harmonics are produced by stopping the string with the first finger and touching it lightly with the fourth, at the interval of a fourth above; the resulting harmonic is two octaves above the stopped note. In writing music this is indicated by writing thus:

The lozenge-shaped notes indicate the notes to be lightly touched. Natural harmonics are frequently used on the harp, guitar, and mandolin.

Harmonie-Musik (Ger.). Harmony music; music for wind instruments. A band composed of brass and wood instruments is called a harmony band.

Harmonist. One who is an expert in the art of harmony.

Harmonium. A keyboard instrument with free reeds. It differs from the reed organ in that the air is forced through instead of drawn through the reeds, giving a stronger, rougher quality of tone. In harmonium music, published in Europe, the stops are indicated by figures placed in a circle. Each stop is divided at the middle. The figure in circle, placed below the bass staff, refers to the lower half of the stop; above the treble staff, to the upper half. The cor anglais and flute form one stop, marked ⓘ below for cor anglais, ⓘ above for flute.

2 means bourdon, below; clarionet, above.
3 means clarion, below; piccolo, above.
4 means bassoon, below; hautboy, above.

Harmony [from Gr. *harmo,* to join]. The art of combining sounds. The study of harmony in its fullest extent is that which treats of the combination of sounds, consonant and dissonant, and their succession. The so-called laws of harmony have all been arrived at empirically, hence have been subject to change, each new composer of sufficient originality and genius modifying them to suit his purposes. Harmonic combinations may be either consonant or dissonant. The consonant combinations consist of the common (perfect) chord and its derivatives. The dissonant combinations all include some dissonant interval, viz., 7th or 2d, augmented 4th, diminished or augmented 5th, augmented 6th or diminished 3d, or 9th. The movement of consonant combinations is perfectly free; that of dissonant combinations is subject to the rules governing the resolution of the dissonant sounds they contain. Two classes of dissonances are recognized: (1) Those that belong to the overtone series, called essential; (2) those that result from the employment of suspensions, retardations, changing and passing notes.

Harp. A string instrument of very ancient origin, probably first suggested by the bow. The earliest forms of Egyptian harps resemble that weapon, the front bar or support being wanting. The modern harp, by means of contrivances for altering the tension of the strings, controlled by pedals, has the complete chromatic scale. The harp is extensively used in the modern orchestra; its clear, "glassy" tones form a striking and effective contrast to the rest of the orchestra. It is most effective when used to give "arpeggios," or broken chords, particularly in soft passages. Scales are ineffective on the harp, and the chromatic scale is impossible. The compass of the modern harp extends from the second C♭ below the bass staff to the second F♭ above the treble staff, six and one-half octaves. The natural harmonics, produced by touching the middle of the string lightly with one hand, are extremely effective in very soft passages.

Harpe (Fr.), **Harfe** (Ger.). The harp.

Harpsichord, Harpsicol, Clavicin (Fr.), **Cembalo** (It.), **Clavicembalo** (It.), **Flügel** (Ger.). A string instrument with keyboard, in shape like the modern grand piano. The sound was produced by pieces of quill, leather, or tortoise-shell, which scratched across the strings when the keys were struck. Harpsichords were often made with two rows of keys and with stops, by means of which the tone might be modified.

Haupt (Ger.) (*howpt*). Head; chief; principal.

Hauptmanuel. Great organ.

Hauptnote. Essential note in a turn, mordent, etc.

Hauptsatz. Principal theme in a sonata or rondo, etc.

Hauptwerk. Great organ.

Hautbois (Fr.) (*ho-boa*). See *Oboe.*

Hautbois d'amour. A small variety of the hautboy.

H dur (Ger.). B major.

H moll (Ger.) (*hah moll*). B minor.

Head. The membrane of a drum; the peg-box of violin, guitar, etc.

Head Voice. See *Voice.*

Heftig (Ger.). Impetuous. Literally, heavily.

Heimlich (Ger.). Mysteriously; secretly.

Heiss (Ger.). Ardent.

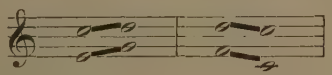
Heiter (Ger.). Clear; calm.

Heptachord [Gr., *hepta,* seven; *korde,* string]. A scale or lyre with seven diatonic sounds.

Herabstrich or **Herstrich** (Ger.). Down bow.

Heraufstrich or **Hinaufstrich** (Ger.). Up bow.

Hidden Fifths or **Octaves.** Called also concealed. These occur when two parts or voices take a 5th or 8th in parallel motion.



The rule forbidding hidden 5ths and 8ths is now very little regarded.

His (Ger.). B sharp.

Hoboe, Hoboy. See *Oboe.*

Hochzeitsmarsch (Ger.) (*hoch-tseits*). Literally, high time. A wedding march.

Hohlflöte (Ger.) (*hole-fla-teh*). Hollow flute; an organ-stop of 8-foot tone, soft, full quality; a stop of the same character a fifth above the diapason is called **Hohlquinte** (*kvin-teh*).

Holding Note. A sustained note; a pedal point.

Homoph'ony, Homophon'ic, Homoph'onous [Gr., *homo,* one or single; *phonos,* sound]. Music in which one part (melody) is the most important factor, the remaining parts being entirely subsidiary, that is, simply accompaniment.

Horn [It., *Corno;* Fr., *Cor;* Ger., *Horn* or *Waldhorn*]. A generic term for instruments of brass or other metal, wood, or animal horns sounded by means of a cup-shaped mouthpiece. In modern usage applied only to the orchestral horn, called also French horn. A brass instrument with a long, narrow tube bent into a number of circular curves, with a large bell. The modern horn is provided with pistons, which make it a chromatic instrument. The custom is now almost universal of using the horn in F, the part for which is written a fifth higher than the actual sounds. Before the application of pistons to the horn its part was always written in C, and the key was indicated by writing: Corni in B♭ or E♭, etc., as the case might be. Many composers retain this method of writing, but the horn-players generally transpose the part *a vista* to suit the F-horn.

Horn Band. In Russia, a band of performers, each one of whom plays but one sound on his horn.

Hornpipe. An old English dance of a lively, rapid character.

Horn-Sordin (Ger.). A contrivance placed in the mouth of the horn to deaden the tone.

Humoresque (Fr.) (*oo-mo-resk*). **Humoreske** (Ger.). A caprice; humorous, fantastic composition.

Hunting Horn [Fr., *Cor de Chasse;* It., *Corno di Caccia*]. The horn from which the orchestral horn was developed.

Hymn Tune. A musical setting of a religious lyric poem, generally in four parts.

I

Idée fixée (Fr.) (*e-deh fix-eh*). Fixed idea; a name given by Berlioz to a short theme used as the principal motive of an extended composition.

Idyl [Fr., *Idylle;* Gr., *Eidullion*]. A small image or form; a short, tender piece of music generally of a pastoral character.

Il piu (It.) (*eel peu*). The most. **Il piu forte possibile,** as loud as possible.

Imitando (It.). Imitating; as, **Imitando la voce,** imitating the voice; a direction to the instrumentalist to imitate the vocalist.

Imitation. A device in counterpoint; a musical phrase being given by one voice is immediately repeated by another voice. There are many varieties of imitation: (1) By augmentation, when the imitating part is in notes of twice or four times the value of those in the theme. (2) By diminution, when the value of the notes is reduced one-half or one-fourth. (3) By inversion, when the intervals are given by the imitating part in inverted order. Imitation is called Canonic when the order of letters and intervals is exactly repeated, thus:

C D E F G A B C

Strict, when the order of letters only is repeated, as:

C D E F A B C D

Free, when the theme is slightly altered, but not enough to destroy the resemblance. The theme is called the antecedent; the imitation, the consequent. There are other varieties of imitation, but they are now generally obsolete, being more curious than musical.

Immer (Ger.). Ever; continuously; always.

Impaziente (It.) (*im-pah-tse-en-teh*). Impatient; restless.

Impazientemente (It.). Vehemently; impatiently.

Imperfect Cadence. Same as *Half Cadence.*

Imperfect Consonance. Major and minor thirds and sixths.

Imperfect Fifth. The diminished fifth.

Imperioso (It.). Imperiously; with dignity.

Impeto (It.) (*im'-peh-to*), **con.** With impetuosity.

Impetuoso (It.), **Impetuosamente** (It.). Impetuously.

Implied Intervals. Those not expressed in the figuring.

Imponente (It.) (*im'-po-nen-teh*). Emphatic; pompous.

Impromptu. (1) An extemporaneous performance. (2) A piece of music having the character of an extemporaneous performance.

Improvisation. Unpremeditated music.

Improvise. To play unpremeditated music.

Improviser (Fr.) (*im-pro-vee-seh*), **Improvvisare** (It.). To extemporize.

Improvvisatore (It.). An improviser (male).

Improvvisatrice (It.) (*im-prov-vi-sa-tree-cheh*). An improviser (female).

In alt (It.). The notes in the first octave above the treble staff.

In altissimo (It.). All notes above the octave *in alt.*

In nomine (Lat.). In the name; a sort of free fugue.

Incalzando (It.) (*in-cal-tsan-do*). To chase; pursue hotly, with constantly increasing vehemence.

Indeciso (It.) (*in-deh-chee-so*). With indecision; hesitating.

Infinite Canon. See *Canon.*

Inganno (It.). Deceptive. **Cadenza inganno,** deceptive cadence.

Inner Parts. The parts that are neither at the top nor the bottom, as the alto and tenor in a chorus.

Inner Pedal. A sustained note in an inner part.

Innig (Ger.). Heartfelt; fervent.

Innigkeit (Ger.), **mit.** With fervor; intense feeling.

Inniglich (Ger.). See *Innig.*

Inno (It.). Hymn.

Innocente (It.) (*in-no-chen'-teh*), **Innocentemente.** Innocent; natural.

Innocenza (*inno-chent'-sah*), **con.** With artlessness.

Inquieto (It.) (*in-quee-eh-to*). Unquiet; restless.

Insensibile (It.) (*in-sen-si-bee-leh*), **Insensibilmente** (It.). By imperceptible degrees; gradually.

Insistendo (It.), **Instante** (It.), **Inständig** (Ger.). Urgent; pressing.

Instrument. Any mechanical contrivance for the production of musical sounds. Instruments are classified as follows: String instruments, wind instruments, pulsatile instruments. String instruments are divided into bow instruments, violin class; instruments the strings of which are plucked by the fingers—harp, guitar, etc.; plectral, *i. e.,* the strings struck by a rod or thin strip of wood, metal, etc., as mandolin, zither; strings struck by hammers held in the hand—cymbal; strings struck by hammers operated by keyboard—pianoforte. Wind instruments are divided as follows: (1) Vibrating column of air—flutes and flue-stops of organ. (2) Single reed—clarionet, saxophone, basset horn, reed-stops in the organ. (3) Double reed—oboe, bassoon. (4) Free reed—harmonium, vocalion, cabinet organ. (5) Brass instruments in which the lip of the player acts as a reed—trumpet, horn, etc. Pulsatile instruments—drums, triangles, cymbals, bells, xylophone. The small or chamber orchestra includes the following instruments: String—first violins, second violins, violas, violoncellos, contrabassi. Wood-wind—pair of flutes (It., *flauti*), pair of hautboys (It., *oboi*), pair of clarionets (It., *clarionetti*), pair of bassoons (It., *fagotti*). Brass-wind—pair of trumpets (sometimes omitted (It., *clarini*), pair of horns (It., *corni*), pair of kettle-drums (It., *timpani*). The addition of three trombones changes this to the full or grand orchestra, which is often augmented by the addition of the following instruments: Wood-wind—piccolo or octave flute, English horn (It., *corno Inglese*), alto or bass clarionet, double bassoon (It., *contra fagotto*). In the brass quartet the horns are increased to four, and the alto, tenor, and bass trombones are added and the bass trombone reinforced by the bass tuba. Three or more kettle-drums are frequently employed, also the following pulsatile instruments: large drum, snare drum, triangle, and cymbals. The harp has almost become an essential in the modern orchestra, whether large or small.

Instrumentation. The art of using a number of instruments in combination; the manner of arranging music for the orchestra.

Instrumento or **Stromento** (It.). An instrument.

Instrumento or **Stromento di corda** (It.). String instrument.

Instrumento or **Stromento di fiato** (It.). Wind instrument.

Interlude, Intermède (Fr.) (*in-ter-made*), **Intermedio** (It.) (*in-ter-meh-deo*). A short piece of music between the acts of a drama or the verses of a hymn.

Intermezzo (It.) (*in-ter-medzo*). An interlude; a short movement connecting the larger movements of a symphony or sonata.

Interrupted Cadence. See *Cadence.*

Interval. The difference in pitch between two sounds. The name of an interval is determined by the number of letters it includes (counting the one it begins with and the one it ends with). Seconds may be minor (E, F), major (E, F♯), augmented (E♭, F♯). Thirds may be minor (E, G), major (E, G♯), diminished (E, G♭). Fourths may be perfect (E, A), augmented (E, A♯), diminished (E, A♭). The inversion of an interval produces one of the opposite kind except when it is perfect. Inversion of minor 2d produces major 7th, and since all intervals lie within the octave, and the octave contains twelve half-tones, it follows that an interval and its inversion must together make an octave or twelve half-tones. Intervals are further divided into consonant and dissonant, the consonant into perfect and imperfect. The perfect consonances are the 4th, 5th, and octave. They are called perfect because any alteration of them produces a dissonance. The imperfect consonances are the major and minor 3d and 6th, called imperfect because equally consonant whether major or minor. All other intervals are dissonant, that is, one or both the sounds forming them must move in a certain direction to satisfy the ear. If the dissonant is minor or diminished the sounds must approach each other (except minor 2d); if major or augmented they must separate (except major 7th, which may move either way). Intervals are augmented when greater than major or perfect. Intervals are diminished when less than major or perfect. The prime or unison is often called an interval and if altered, as C $\widehat{\text{C}}$♯, is called an augmented unison or prime; it is more properly a chromatic semitone. Natural intervals are those found in the major scale. Chromatic intervals are those found in the harmonic minor scale and in chords that include sounds foreign to the scale or key.

Intimo (It.) (*in'-tee-mo*). Heartfelt; with emotion.

Intonation. (1) The correctness or incorrectness of the pitch of sounds produced by the voice or by an instrument. (2) The notes which precede the reciting notes of the Gregorian chant.

Intoning. In the Anglican Church the singing of prayers, etc., in monotone.

Intrada (It.). An introduction or interlude.

Intrepido (It.) (*in-tre-pee-do*), **Intrepidezza, con** (It.) (*in-treh-pee-detza*), **Intrepidamente** (It.) (*in-treh-pee-da-men-teh*). Boldly; with daring; dashingly.

Introduction. A preparatory movement to a piece of music, symphony, oratorio, etc., sometimes very short, sometimes a long, elaborate movement in free style.

Introduzione (It.) (*in-tro-doo-tse-oneh*). Introduction.

Introit. A short anthem sung before the administration of the communion in the Protestant Episcopal Church; in the Roman Catholic Church before the celebration of the mass.

Invention. A name given by Bach to a set of thirty pieces in contrapuntal style.

Inversion. (1) Of intervals. See *Interval.* (2) Of chords, when any member of the chord but the root is used as a bass. (3) Of themes. See *Imitation.*

Ira (It.) (*e-rah*), **con.** With anger.

Irato (It.) (*e-rah'-to*). Angrily.

Irlandais (Fr.) (*ir-lan-day*). In the Irish style.

Ironico (It.) (*e-ron'-e-co*), **Ironicamente** (It.). Ironically; sardonically.

Irresoluto (It.) (*ir-reh-so-lu'-to*). Undecided; irresolute.

Islancio (It.) (*is-lan'-chee-o*). Same as *Slancio.*

Istesso (It.). Same. **L'istesso tempo,** the same time, *i. e.,* rate of movement.

Italian Sixth. See *Augmented Sixth.*

Italienne (Fr.) (*e-ta-lee-en*), **Italiano** (It.) (*e-tal-yah-no*). In Italian style.

J

Jack. The short, upright piece of wood at the end of the key of the harpsichord or spinet, to which the quill was attached which struck the strings.

Jagdhorn (Ger.) (*yagd-horn*). Hunting horn.

Jägerchor (Ger.) (*yay-ger-kore*). Hunting chorus.

Jaleo (Sp.) (*hah-leh-o*). A Spanish dance in triple time.

Janko Keyboard (yanko). The invention of Paul Janko, arranged like a series of steps, six in number. Each key may be struck in three places, some on the 1st, 3d and 5th steps, the rest on the 2d, 4th, and 6th, thus enabling the performer to select the most convenient for the passage to be executed. The chief advantages claimed for this keyboard are: that all scales may be fingered alike; that the thumb may be placed on any key, black or white; that the extended chords are brought within easy reach.

Janissary Music. Instruments of percussion, as small bells, triangles, drums, cymbals.

Jeu (Fr.) (*zhoo*). Literally, play. A stop on the organ.

Jeu d'anche (*d'ongsh*). Reed stop.

Jeu de flute. Flue stop.

Jeu demi (*deh-mee*). Half power; mezzo forte.

Jeu doux (*doo*). Soft stops.

Jeu forts (*fort*). Loud stops.

Jeu grand. Full organ.

Jeu plein (*plane*). Full power.

Jig [It., *Giga;* Fr. and Ger., *Gigue;* comes either from Geige, an obsolete variety of fiddle, or from Chica, a rapid Spanish national dance]. Now a rapid rustic dance of no fixed rhythm or figures. In the classic suite the jig is the last movement, written in $\frac{6}{8}$ time and often very elaborately treated in fugal form.

Jodeln (Ger.) (*yo-deln*). A manner of singing cultivated by the Swiss and Tyrolese; it consists of sudden changes from the natural to the falsetto voice.

Jota (Sp.) (*ho-ta*). A Spanish national dance in triple time.

Jour (Fr.) (*zhoor*). Day. An open string is called corde à jour.

Jubal (Ger.) (*yoo-bal*). An organ-stop of 2- or 4-foot pitch.

Jungfernregal (Ger.) (*yung-fern-reh-gal*). See *Vox angelica.*

Just Intonation. Singing or playing in tune.

K

Kalamaika (*ka-la-my-ka*). A Hungarian dance; rapid $\frac{2}{4}$ time.

Kammer (Ger.). Chamber.

Kammerconcert. Chamber concert.

Kammermusik. Chamber music.

Kammerstil. Chamber-music style.

Kammerton. Concert pitch.

Kanon, Kanonik (Ger.). See *Canon.*

Kanoon. A Turkish dulcimer, played like the psalterion by means of plectra attached to thimbles.

Kantate (Ger.). Cantata.

Kapellmeister (Ger.). The leader of a band or chorus attached to a royal or noble household.

Kapellmeister-Musik (Ger.). A contemptuous term for music that is dull and unoriginal, while it may be correct and pedantic.

Keckheit (Ger.). Boldness. **Mit Keckheit,** with boldness.

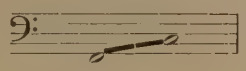
Kehrab or **Kehraus** (Ger.). Lit., turn out. The last dance at a ball.

Kent Bugle. A wind instrument generally made of copper, with cup-shaped mouthpiece, furnished with keys. It was named in honor of the Duke of Kent.

Keraulophon [from Gr., *keras,* horn; *aulos,* flute; and *phone,* sound]. A soft flue-stop of 8-foot pitch.

Keren. A Hebrew trumpet.

Kettle-drum. A half-sphere of copper, the head made of vellum, which may be tightened or loosened by means of screws or braces. The kettle-drum is the only drum from which sounds of definite pitch may be obtained. They are generally used in pairs in the orchestra, and are tuned to the tonic and dominant of the key, but modern writers adopt various other methods of tuning; it is also quite usual now to use three drums. The larger drum may be tuned to any note from



The smaller

In old scores the drum part was always written in C and the sounds wished were indicated by writing Timpani in F, B♭, etc. The modern custom is to write the actual sounds.

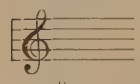
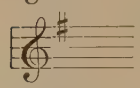
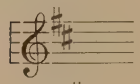
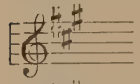
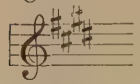
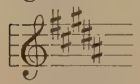
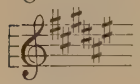
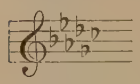
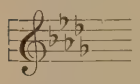
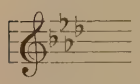
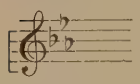
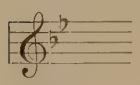
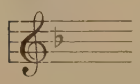
Key. (1) A series of sounds forming a major or minor scale. See *Scale*. (2) A piece of mechanism by means of which the ventages of certain wind instruments, as flute and clarionet, are closed or opened. (3) A lever by which the valves of the organ are opened or the hammers of the pianoforte put in motion.

Klangfarbe (Ger.). Lit., sound-color. Quality of tone; timbre (Fr., *tambr*).

Klavier or **Klaviatur** (Ger.) (*kla-feer', klah-fee-a-toor'*). Keyboard.

Klavierauszug. Pianoforte arrangement.

TABLE OF SIGNATURES AND NAMES OF ALL THE MAJOR AND MINOR KEYS

Key-signature.	English.	German.	French.	Italian.	
	C-major A-minor	C dur A moll	Ut majeur La mineur	Do maggiore La minore	Natural key.
	G-major E-minor	G dur E moll	Sol majeur Mi mineur	Sol maggiore Mi minore	Keys with sharps.
	D-major B-minor	D dur H moll	Ré majeur Si mineur	Re maggiore Si minore	
	A-major F-sharp minor	A dur Fis moll	La majeur Fa dièse mineur	La maggiore Fa diesis minore	
	E-major C-sharp minor	E dur Cis moll	Mi majeur Ut dièse mineur	Mi maggiore Do diesis minore	
	B-major G-sharp minor	H dur Gis moll	Si majeur Sol dièse mineur	Si maggiore Sol diesis minore	
	F-sharp major D-sharp minor	Fis dur Dis moll	Fa dièse majeur Ré dièse mineur	Fa diesis maggiore Re diesis minore	
	G-flat major E-flat minor	Ges dur Es moll	Sol bémol majeur Mi bémol mineur	Sol bemolle maggiore Mi bemolle minore	Keys with flats.
	D-flat major B-flat minor	Des dur B moll	Ré bémol majeur Si bémol mineur	Re bemolle maggiore Si bemolle minore	
	A-flat major F-minor	As dur F moll	La bémol majeur Fa mineur	La bemolle maggiore Fa minore	
	E-flat major C-minor	Es dur C moll	Mi bémol majeur Ut mineur	Mi bemolle maggiore Do minore	
	B-flat major G-minor	B dur G moll	Si bémol majeur Sol mineur	Si bemolle maggiore Sol minore	
	F-major D-minor	F dur D moll	Fa majeur Ré mineur	Fa maggiore Re minore	

Keyboard, Klavier (Ger.) (*kla-feer*). The rows of keys of the organ or piano; those for the hands are called manuals, for the feet, pedals.

Keynote. The sound or letter with which any given scale begins; tonic. See *Scale*.

Kinderscenen (Ger.) (*kin-der-stsa-nen*). Child-pictures; a name given by Schumann to a collection of little pieces for the piano.

Kinderstück (Ger.). Child's piece.

Kirchenmusik (Ger.). Church music.

Kirchenstil. Church style.

Kirchenton. Ecclesiastical mode.

Kit, Pochette (Fr.), **Taschengeige** (Ger.). A small pocket-fiddle used by dancing-masters.

Klaviermässig. Suited to the piano.

Klaviersatz. In pianoforte style.

Klavierspieler. Pianist.

Klein (Ger.). Small; minor.

Klein gedeckt. Small stopped diapason.

Knee-stop. A lever controlled by the knees of the performer, used in the harmonium or cabinet organ either to operate the swell or to put on or off the full power of the instrument.

Koppel (Ger.). A coupler. **Koppel ab,** coupler off. **Koppel an,** coupler on.

Kosakisch (Ger.). Cossack dance in $\frac{2}{4}$ time.

Kraft (Ger.). Force; power.

Kräftig (Ger.). Vigorous; powerfully.

Krakowiak (*kra-ko-viak*). Cracovienne.

Kreuz (Ger.) (*kroyts*). A sharp.

Kriegerisch (Ger.). Martial.

Kriegerlied (Ger.). War-song.

Krummhorn (Ger.). Crooked horn; the cremona stop.

Kunst (Ger.). Art.

Kunstlied (Ger.). An artistic song; the reverse of a popular song or Volkslied.

Kurz (Ger.) (*koorts*). Short; staccato.

Kurz und bestimmt. Short and emphatic.

Kyrie [Gr., *Lord*]. The first word of the mass; used as a name for the first division.

L

L. H. Abbreviation for left hand; in German, *linke Hand.*

La. The sixth Aretinian syllable; the name in French and Italian of the sound A.

Labial [Lat., *labium, lip*]. A flue-stop.

Labialstimme (Ger.). A flue-stop.

Lacrimoso or **Lagrimoso** (It.) [from *la grima,* tear]. Tearfully; mournfully.

Lamentabile, Lamentabilmente, Lamentando, Lamentevolmente, Lamentevole, Lamentato [It., from *lamentare,* to lament]. Mournfully; complainingly.

Lancers. The name of a variety of the contra dance.

Ländler (Ger.) (*laynd-ler*). A slow waltz of South German origin.

Langsam (Ger.). Slow. **Etwas langsam,** rather slow (poco adagio). **Ziemlich** (*tseem-lich*) **langsam,** moderately slow (andante). **Sehr langsam,** very slow (adagio).

Language. The diaphragm of a flue-pipe.

Languendo (It.) (*lan-gwen'-do*), **Languente** (It.) (*lan-gwen'-teh*) [from *lan-guire,* to languish], **Languemente** (It.) (*lan-gweh-men'-teh*). In a languishing style.

Largamente (It.). Broadly; slowly; with dignity.

Largando (It.). Gradually slower and broader.

Largement (Fr.) (*larzh-mong*). Largamente.

Larghetto (It.) (*lar-get-to*). Rather slow.

Larghissimo (It.) (*lar-gis-sim-mo*). Slowest possible time.

Largo (It.). Lit., large; broad. Very slowy, stately movement is indicated by this term.

Largo assai. Slow enough.

Largo di molto. Very slow.

Largo ma non troppo. Slow, but not too much so.

Larigot (Fr.) (*larigo*). An organ-stop of 1⅓-foot pitch, that is, a twelfth-stop.

Lauftanz (Ger.). Running dance; the coranto.

Launig (Ger.) (*low-nig*). Gay; light; facile.

Lavolta (It.). An old Italian dance resembling the waltz.

Lay [Ger., *Lied;* Fr., *lai*]. A song.

Leader. Conductor; principal violinist in an orchestra; principal clarionet in a wind band; principal cornet in a brass band.

Leading Motive. In German, *Leitmotiv, q. v.*

Leading Note. The 7th note of a scale; in the major scale the 7th is naturally a half-tone below the keynote, in the minor scale it is naturally a whole tone below, and must be raised by an accidental (see *Minor Scale*); called also subtonic.

Leaning Note. See *Appoggiatura.*

Leap. To move from one tone to another more than one degree distant; the reverse of diatonic or chromatic.

Lebendig (Ger.) (*leh-ben'-dig*), **Lebhaft** (Ger.) (*lehb'-hahft*). Lively; with animation.

Ledger Line. See *Leger Line.*

Legato (It.) (*leh-gah'-to*), **Legando** (It.) (*leh-gan'-do*) [from *legare,* to tie or bind]. Passages thus marked are to be played with smoothness, without any break between the tones. *Legatissimo,* as smooth as possible, the notes slightly overlapping. Legato is indicated by this sign ⁀ called a slur. The proper observance of Legato is of the utmost importance in phrasing.

Legatura (It.) (*leh-gah-too'-ra*). A tie.

Legatura di voce (*de-vo-cheh*). A group of notes sung with one breath; a vocal phrase.

Legend, Légende (Fr.) (*leh-zhend*), **Legende** (Ger.) (*leh-ghen'-deh*). A name given to an extended lyric composition, somewhat in the manner of "program music." [*Cf.* Chopin's Légendes.]

Léger, Lègere (Fr.) (*leh'-zhehr*). Light.

Leger Line. Short lines used for notes which are above or below the staff.

Légèrment (*leh-zhehr-mong*). Lightly.

Leggeramente (*led-jehr-a-men'-teh*). Lightly.

Leggerezza (It.) (*led-jeh-ret'-za*). Lightness.

Leggero (*led-jeh-ro*), **Leggiero** (*led-jee-ro*). Light; rapid.

Leggiadramente (It.) (*led-jah-drah-men'-teh*), **Leggiaramente** (*led-jah-rah-men'-teh*), **Leggiermente** (*led-jeer-men'-teh*). All these terms (derived from the same root—*leggiere,* light, quick, nimble) indicate a light, rapid style of performance without marked accent.

Legno (It.) (*lehn-yo*). Wood. **Col legno,** with the wood. A direction in violin playing to strike the strings with the wooden part of the bow.

Leicht (Ger.). Light; easy.

Leichtbewegt (Ger.) (*beh-vehgt*). Light; with motion.

Leidenschaft (Ger.). Passion; fervency.

Leidenschaftlich (Ger.). Passionately.

Leierkasten. Barrel-organ.

Leiermann. Organ-grinder.

Leise (Ger.) (*lei'-seh*). Soft; piano.

Leiter (Ger.). Ladder. **Tonleiter,** tone-ladder; scale.

Leitmotiv (Ger.). Leading motive; a name given by Wagner to certain striking phrases used to indicate certain emotions, characters, or situations.

Leitton (Ger.). Leading note.

[NOTE.—*ei* in German is sounded like *eye* in English.]

Lenezza (It.) (*leh-net'-za*). Gentleness.

Leno (It.) (*leh'-no*). Faint; feeble.

Lentamente (*len-tah-men-teh*). Slowly.

Lentando. Growing slower; retarding.

Lentezza (*len-tet-za*). Slowness.

Lento (It.). Slow, between adagio and grave.

Lesser. Minor is sometimes so called, as key of C with lesser third; C minor.

Lesson. A name used in England for the suite, or the various members of it.

Lesto (It.) (*leh'-sto*). Lively; brisk.

Letter Name. The letter used to designate a degree of the scale, key of piano or organ, line or space of the staff.

Levé (Fr.) (*leh-veh*). Raised; up beat.

Leyer or **Leier** (Ger.). Lyre.

Liaison (Fr.) (*lee-eh-song*). A tie.

Libellion. A variety of music-box.

Liberamente (It.) (*lee-beh-ra-men'-teh*), **Librement** (Fr.) (*leebr-mong*). Freely.

Libretto (It.) (*lee-bret-to*). Little book; the book of an opera or oratorio, etc.

License, Freiheit (Ger.), **Licence** (Fr.), **Licenza** (It.) (*lee-chentza*). An intentional disregard of a rule of harmony or counterpoint.

Liceo (It.) (*lee-cheh'-o*). Lyceum; academy of music.

Lie (Fr.) (*lee-eh*). Tied; bound; legato.

Lieblich (Ger.). Sweet; lovely.

Lieblich gedacht. Stopped diapason.

Lied (Ger.) (*leed*). Song. **Durchkomponirtes Lied** (all through composed), a song with different melody, etc., to every stanza. **Strophenlied,** the same melody repeated with every stanza. **Kunstlied,** art song; high class of song. **Volkslied,** people's song; national song.

Lieder-Cyclus. Song-circle (as Schubert's Müllerin).

Liederkranz. A singing-society.

Liederkreis. Song circle; collection of songs.

Liederspiel. Song-play; operetta; vaudeville.

Liedertafel (song-table). A social singing-society.

Ligato. See *Legato.*

Ligature. A tie. See *Legatura.*

Ligne (Fr.) (*leen*), **Linea** (It.) (*lee'-neh-ah*), **Linie** (Ger.) (*lee-nee-eh*). Line.

Lingua (It.) (*ling-wah'*). Tongue; reed of organ-pipe.

Linke Hand (Ger.). Left hand.

Lip. The upper and lower edges of the mouth of an organ pipe. **To lip,** the act of blowing a wind instrument.

Lippenpfeife or **Labialpfeife** (Ger.). A flue pipe-organ.

Lira (It.) (*lee'-ra*). Lyre.

Lirico (It.) (*lee'-ree-co*). Lyric.

Liscio (It.) (*lee'-sho*). Smooth.

L'istesso (It.) (*lis-tes'-so*). See *Istesso.*

Litany [from Gr., *litaino,* to pray]. A form of prayer consisting of alternate petitions and responses by priest and people, frequently sung or chanted.

Livre (Fr.) (*leevr*). Book. **A livre ouvert,** "at open book"; to sing or play at sight.

Lobgesang (Ger.). Song of praise.

Loco (It.). Place; play as written. Used after *8va.*

Lontano (It.), **Da lontano.** As if from a distance.

Lösung or **Auflösung** (Ger.) (*lay-soonk*) [from Ger., *lösen,* to free]. Resolution.

Loud Pedal. A name for the damper-pedal.

Loure (Fr.) (*loor*). (1) A slow dance in $\frac{6}{4}$ or $\frac{3}{4}$ time. (2) An old name for a variety of bag-pipe.

Louré (Fr.) (*looreh*). Legato; slurred.

Low. (1) Soft. (2) Deep in pitch.

Lugubre [Fr., *loo-goobr;* It., *loo-goo-breh*]. Mournful.

Lullaby. Cradle song; berceuse.

Lunga (It.). Long. **Lunga pausa,** long pause.

Luogo (It.). See *Loco.*

Lusingando (It.) (*loos-in-gan'-do*), **Lusingante** (It.) (*loo-sin-gan'-teh*), **Lusinghevolmente** (It.) (*loo-sing-eh-vol-men'-teh*), **Lusinghiere** (It.) (*loo-sin-gee-eh-reh*). Coaxing; caressing; seductive. [From It., *lusingare,* to coax or flatter.]

Lustig (Ger.) (*loos-tig*). Merry; gay; lively.

Lute, Luth (Ger.) (*loot*). A string instrument of the guitar family of very ancient origin. It was brought into Europe by the Moors. In shape it resembled the mandolin, and was strung with from six to twelve or more strings of gut. The bass strings were wire-covered and did not pass over the fingerboard. For several centuries the lutes held the foremost place as fashionable instruments. They were made of several sizes. The larger varieties were called Theorbo, Arch Lute, or Chittarone. Music for the lute was written in a system of notation called tablature, *q. v.*

Luth (Ger.) (*loot*). Lute.

Luthier (Ger.) (*loot-eer*). A lute-maker; also given to makers of all string instruments of the guitar or violin families.

Luttosamente. Mournfully. [From It., *luttare,* to mourn; struggle.]

Luttoso (It.) (*loot-to-so*). Mournful.

Lyre. A Greek string instrument of the harp family.

Lyric. Song-like. In poetry, a short poem of a simple, emotional character. The term has been borrowed by music to designate musical works of like character.

Lyric Form. A composition the themes of which are not treated in the manner of the rondo or sonata, *q. v.*

Lyric Stage. The operatic stage. This term will hardly apply to the modern "music drama."

M

M. Abbreviation for Mano or Main, the hand.

M. D. Abbreviation for Main Droite or Mano Destra, the right hand.

M. F. Abbreviation for Mezzo Forte, half loud.

M. G. Abbreviation for Main Gauche, left hand.

M. M. Abbreviation for Maelzel's Metronome.

M. V. Abbreviation for Mezzo Voce.

Ma (It.). But.

Machine Head. The screw and wheel contrivance used instead of pegs in the guitar, etc.

Madre (It.) (*mah'-dreh*). Mother; the Virgin Mary.

Madrigal. A word of uncertain origin. A name given to contrapuntal compositions in any number of parts. They differ from the motet only in being written to secular words, generally amatory. This style of composition was cultivated with great success in England in Elizabeth's reign.

Maesta (It.) (*mah'-es-ta*), **con, Maestade** (*mah'-es-tah-deh*), **con, Maestevole** (*mah'-es-ta-vo-leh*), **Maestevolmente** (*vol-ment-e*), **Maestosamente** (*mah'-es-to-sah-men'-teh*). All mean the same thing: Dignified; with dignity.

Maestoso (It.) (*mah-es-to-so*). Majestic; with dignity.

Maestrale (It.) (*mah-es-trah-leh*). "Masterful"; the stretto of a fugue when written in canon.

Maestro (It.) (*mah-es-tro*). Master.

Maestro al cembalo. Old term for conductor of orchestra, so called because he conducted seated at the cembalo, or harpsichord.

Maestro del coro. Master of the chorus or choir.

Maestro del putti (*del poot'-tee*). Master of the boys (choir boys).

Maestro di capella. Chapel-master; choir-master; name also given to the conductor of the music in the household of a great personage.

Magadis (Gr.). A string instrument tuned in octaves.

Magas (Gr.). A bridge.

Maggiolata (It.) (*madjo-lah'-tah*). A spring song (from Maggio—May).

Maggiore (It.) (*mad-jo'-reh*), **Majeur** (Fr.) (*mah-zhoor*), **Dur** (Ger.) (*duhr*). Major.

Maggot. Old English name for a short, slight composition of fanciful character.

Magnificat (Lat.). Doth magnify; opening word of the hymn of the Virgin Mary.

Main (Fr.) (*mang*). Hand. **M. D.** or **droite,** right hand; **M. G.** or **gauche,** left hand.

Maitre (Fr.) (*mehtr*). Master.

Maitrise (Fr.) (*meh-trees*). A cathedral music school.

Majestätisch (Ger.) (*mah-yes-tay'-tish*). Majestically.

Major (Lat.). Greater.

Major Chord or **Triad.** One in which the third over the root is major, *i. e.,* two whole tones above the root.

Major Scale. One in which the third of the scale is a major third above the keynote. **Major Key,** or **Mode,** or **Tonality,** has the same meaning.

Malinconia (It.) (*mah-lin-co-nee'-a*), **Malinconico, Malinconoso, Malinconioso, Malinconicamente.** Melancholy; in a sad, melancholy manner.

Mancando (It.) [from *mancare,* to want; fail]. Decreasing; dying away in loudness and speed.

Manche (Fr.) (*mansh*), **Manico** (It.) (*mah'-nee-ko*). Handle; neck of violin, etc.

Mandola (It.), **Mandora.** A large mandolin.

Mandolin, Mandolino (It.) (*man-do-lee-no*). A string instrument of the lute family, strung with eight wire strings tuned in pairs; the tuning same as the violin; played by means of a small plectrum; fingerboard fretted like the guitar.

Mandolinata (It.). Resembling the mandolin in effect.

Manichord [from Lat., *manus,* hand; *chorda,* string]. Supposed to be the earliest form of a string instrument, with keyboard, possibly the same as the clavichord.

Manier (Ger.) (*mah-neer'*). A harpsichord grace.

Maniera (It.) (*man-yeh'-ra*). Manner; style.

Männerchor (Gr.) (*man'-ner-kor*). A men's chorus.

Männergesangverein. Lit., men's song-union.

Mano (It.). Hand. **D.** or **destra,** right hand; **S.** or **sinistra,** left hand.

Manual [from Lat., *manus,* hand]. An organ keyboard.

Marcando, Marcato. Decided; marked; with emphasis.

Marcatissimo. As decided as possible.

March, Marche (Fr.) (*marsh*), **Marcia** (It.) (*mar-chee-a*), **Marsch** (Ger.) (*marsh*). A composition with strongly marked rhythm, designed to accompany the walking of a body of men. Marches vary in tempo from the slow, funeral march to the "charge." The following are the principal varieties: Parade March (Ger., *Paraden-Marsch;* Fr., *pas-ordinaire*); Quick-march or Quickstep (Ger., *Geschwind-Marsch;* Fr., *pas redoublé*); Charge (Ger., *Sturm-Marsch;* Fr., *pas-de-charge*). The funeral march and parade march are generally in $\frac{4}{4}$ time; the quick marches often in $\frac{6}{8}$ time.

Mark. A sign, *q. v.*

Markiert (Ger.) (*mar'-keert*), **Marqué** (Fr.) (*mar-kay*). See *Marcato.*

Marseillaise (Fr.) (*mar-sel-yase*). The French national song, composed by Rouget de Lisle.

Martelé (Fr.) (*mar-tel-leh'*), **Martellato** (It.) (*mar-tel-lah'-to*). Hammered. In piano music indicates a heavy blow with stiff wrist; in violin music, a sharp, firm stroke.

Marziale (It.) (*mart-se-a'-leh*). Martial.

Maschera (It.) (*mas-kay'-ra*). A mask.

Mascherata (It.) (*mas-kay'-ra-ta*). Masquerade.

Masque. Mask. A species of musical and dramatic entertainment founded on mythical or allegorical themes.

Mass, Missa (Lat.), **Messa** (It.), **Messe** (Fr. and Ger.). The communion service in the Roman Catholic Church. In music, that portion of the service consisting of the Kyrie, Gloria, Sanctus, and Agnus Dei, which are sung. The word mass is generally explained as being derived from the words *"Ite missa est,"* used to dismiss non-communicants before the service. High Mass is used on feasts and festivals. Low Mass on ordinary occasions, sometimes without music.

Mässig (Ger.) (*may'-sig*). Moderate; moderato.

Massima (It.). Whole note.

Master Chord. The dominant chord.

Master Fugue. One without episodes.

Master Note. The leading note.

Masure (*mah-soo-re*), **Masurek, Masurka, Mazurka.** A Polish dance in $\frac{3}{4}$ time.

Matelotte (Fr.). A sailors' hornpipe dance in $\frac{2}{4}$ time.

Matinée (Fr.) (*ma-tee-neh'*). A morning concert.

Mean. Old name for an inner part in music for voices; also for inner strings of viol, lute, etc. The C clef was also called the mean clef.

Measure. (1) Old name for any slow dance. (2) The portion of music enclosed between two bars. (3) Rhythm. (4) Tempo.

Mechanism, Mecanisme (Fr.), **Mechanik** (Ger.). (1) A mechanical appliance. (2) Technical skill.

Medesimo (It.) (*mee-deh'-see-mo*). The same as. **Medesimo tempo,** the same time.

Mediant. The third degree of the scale.

Mediation. That part of a chant (Anglican) between the reciting note and the close.

Meisterfuge (Ger.). See *Master-fugue.*

Meistersänger or **Meistersinger** (Ger.). Mastersinger. The Meistersängers were the successors of the minnesingers. Chief among them was Hans Sachs, the hero of Wagner's opera, "Die Meistersinger." The Meistersänger first appeared in the 14th century. They were for the most part workingmen, differing in this respect from the minnesingers, who numbered royal and noble singers in their ranks. The Meistersänger became extinct in 1839, when their last society in Ulm was dissolved.

Melancolia (It.), **Mélancholic** (Fr.). See *Malinconia.*

Mélange (Fr.) (*meh-lonzh*). A medley.

Melisma (Gr.). (1) A song; melody. (2) A run; roulade.

Melismatic. Florid vocalization. A melismatic song is one in which a number of notes are sung to one syllable, as in the florid passages in Handel's solos.

Melodeon. The precursor of the cabinet organ; an instrument with free reeds, operated by suction.

Melodia (It.). (1) Melody. (2) An organ-stop of 8- or 4-foot pitch; soft, flute-like quality.

Melodic. Pertaining to melody, as opposed to harmonic.

Melodico, Melodicoso (It.). Melodiously.

Mélodie (Fr.). Melody; air.

Melodrama. A play abounding in romantic and dramatic situations, with or without musical accompaniment. Melodramatic music is music used to accompany and "intensify" the action of a drama. The term is also applied to instrumental music abounding in startling changes of key or sudden changes of loud and soft.

Melody. An agreeable succession of single sounds, in conformity with the laws of rhythm and tonality. In music for voices the melody is generally in the soprano, or, if for male voices, in the first tenor, but there are many exceptions to this. In orchestral music it is even less necessary that the melody should be in the highest part, as the varying "tone color" of the instruments used is enough to give it the necessary prominence.

Melograph. A mechanical device for recording improvisation on the pianoforte. Many attempts have been made to produce such a machine, but with only partial success.

Melopiano. A pianoforte in which a continuous tone was produced by a series of small hammers which struck rapidly repeated blows on the strings. Invented by Caldara in 1870. It was re-invented in 1893 by Hlavàc of St. Petersburg, and exhibited at the Columbian Exposition, where it attracted great attention.

Melos (Gr.). Melody. Used by Wagner as a name for the recitative in his later works.

Même (Fr.) (*mame*). The same.

Men. (It.). Abbreviation for **Meno,** less; as, **Meno mosso,** slower, less motion.

Menestral (Fr.). Minstrel; Troubadour.

Ménétrier (Fr.) (*meh-neh'-tree-eh*). A fiddler.

Mente (It.) (*men-teh*). Mind. **Alla mente,** improvised.

Menuet (Fr.) (*me-noo-eh*), **Menuett** (Ger.), **Minuetto** (It.). Minuet; a slow, stately dance in $\frac{3}{4}$ time, retained as one of the members of the sonata, quartet, symphony, etc., until Beethoven changed it into the scherzo.

Mescolanza (It.) (*mes-co-lant'-sa*). A medley.

Messa di voce (It.) (*messa-dee-vo-cheh*). Swelling and diminishing on a sustained sound; literally, "massing of the voice."

Mestizia (It.) (*mes-tit'-sia*), **con.** With sadness.

Mesto (It.) (*mehs-to*). Gloomy; mournful.

Mestoso, Mestamente. Mournfully; sadly.

Mesure (Fr.) (*meh-soor*). Measure. **A la mesure,** in time.

Metal Pipes. Organ-pipes made of tin, zinc, etc.

Metallo (It.). Metal; a metallic quality of tone. **Bel metallo di voce,** fine, "ringing" quality of voice.

Meter or **Metre** [Gr., *metron,* a measure]. Properly belongs to poetry, from whence it is transferred to music. In poetry it has two meanings: (1) As applied to a group of syllables; (2) as applied to the number of these groups in a line. English prosody recognizes four groups of syllables, called feet: (1) The Iambus, consisting of a short or unaccented syllable followed by a long or accented syllable as, be-fore; (2) the Trochee, which is just the reverse, as mu-sic; (3) the Anapest, two short followed by a long, as, re-pro-duce; (4) the Dactyl, which is just the reverse, as, fear-ful-ly. As applied to lines (verses), **Long Meter** signifies four iambic feet in every line; **Common Meter** (also called **Ballad Meter**) an alternation of four and three iambic feet; **Short Meter,** two lines of three feet, one of four, and one of three in every stanza. Trochaic, Anapestic, and Dactyllic Meters are indicated by figures giving the number of syllables in each line, as 8, 6, 8, 6, etc. It is important to the musician to become thoroughly familiar with prosody, lest he fall into the too common error of setting short syllables to the accented beats of the measure, or the reverse.

Method, Méthode (Fr.) (*meh-tode*), **Metodo** (It.). (1) System of teaching. (2) Manner of using the voice, or of performing on an instrument.

Metronome [Gr., *metron,* measure; *nomos,* rule]. A mechanical device for determining the time-value of the beat. The one in ordinary use is attributed to Maelzel, whose name it bears. It consists of a pendulum with two bobs, one of which is movable, driven by clockwork; back of the movable bob is a graduated scale. It is used as follows: If the metronomic indication at the beginning of a piece of music in $\frac{4}{4}$ time is ♩ = 100 (¼-note equal to 100), the movable bob is slid along the rod until it is opposite the figures 100, the pendulum is set in motion, and one swing—indicated by a sharp click—is allowed to every beat.

Mettez (Fr.) (*met-teh*). Put; in organ music used in the sense of "draw" or "add" any stop or stops.

Mezzo or **Mezza** (It.) (*med-zo*). Half.

Mezzo Aria. A style of singing in which the distinctness of recitative is aimed at; also called **Aria parlante,** "speaking aria."

Mezzo Forte. Half loud.

Mezzo Piano. Half soft.

Mezzo Soprano. The female voice between the alto and soprano.

Mezzo Tenore. A tenor with range of baritone.

Mezzo Voce. Half voice.

Mi (It.) (*mee*). The name of E in French, Italian, and Spanish. **Mi contra fa** (mi against fa), the interval from F to B♮; the tritone; three whole tones.

Middle C. The C half way between the fifth line of the bass staff and first line of the treble staff; the C always indicated by the C clef:

Militairemente (Fr.) (*mee-lee-tehr-mong*), **Militarmente** (It.) (*mee-lee-tar-men-teh*). Military style.

Military Band. Consists of (1) brass instruments only; (2) saxophones; (3) brass instruments and clarionets; (4) brass, wood, and saxophones.

Minaccivole (It.) (*min-nat-chee'-vo-leh*), **Minnacivolmente** (*min-nat-chee-vol-men'-teh*), **Minnacciando** (*min-nat-chee-an'-do*), **Minnacciosamente** (*min-nat-chee-o-sa-men'-teh*), **Minnaccioso** (*min-nat-chee-o'-so*). Menacing; threatening.

Mineur (Fr.) (*mee-noor*). Minor.

Minim. A half-note.

Minnesänger or **Minnesinger** (Ger.). German name for Troubadour; literally, love-singer.

Minor (Lat.). Lesser.

Minor Chord. The third above the root minor.

Minor Interval. One half-tone less than major.

Minor Scale. The third degree, a minor third above the keynote.

Minstrel. See *Troubadour.* Minstrel has been adopted as the name of the imitation Ethiopians who sing songs supposed to be illustrative of the manners and customs of the plantation negroes in the days of slavery.

Minuet. See *Menuet.*

Mise de voix (Fr.) (*meese de vo-a*). See *Messa di voce.*

Mise en scene (Fr.) (*meese ong scayne*). The "getting up"; putting on the stage of a play, opera, etc.

Misteriosamente. Mysteriously.

Misterioso (It.). Mysterious.

Misurato (It.) (*mee-soo-rah'-to*). Measured; in strict time.

Mit (Ger.). With.

Mit Begleitung (*be-gley'-toonk*). With accompaniment.

Mixed Cadence. A close, consisting of subdominant, dominant, and tonic chords, so called because it includes the characteristic chords of both the plagal and authentic cadences, viz.: subdominant and dominant.

Mixed Chorus, Mixed Voices. Male and female voices together.

Mixolydian. See *Mode.*

Mixture. An organ-stop with from three to six small pipes to each note, tuned to certain of the overtones of the fundamental (diapason) used in full organ only.

Mobile (It.) (*mo'-bee-leh*). With motion; mobile.

Mode [Lat., *modus,* manner, way]. (1) A scale in Greek and ecclesiastical music. (2) In modern music used only in conjunction with the terms major and minor, as Major Mode, Minor Mode. **Greek Modes;** the scale system of the Greeks is not yet quite satisfactorily made out. According to Chappel, who is considered the best authority, the succession of whole and half tones was the same in all the modes, their only difference being in pitch. He gives the following as the initial notes of the principal modes: Dorian (the standard mode) D, Phrygian E, Lydian F♯, Mixolydian G. Those modes the initial notes of which are below the Dorian were distinguished by the prefix *hypo,* beneath, as Hypolydian C♯, Hypophrygian B, Hypodorian A. The succession of sounds was like that of the natural scale of A minor. Church (or ecclesiastical), or Gregorian, or Ambrosian modes were derived from the Greek modes, but discarded the chromatic sounds. Thus the Dorian and Phrygian were the same, that is, had the same initial sounds, but the Lydian began on F instead of F♯. There are other differences between the Greek and the Church modes, viz.: The first four are called authentic; those the initial notes of which are below the Dorian are called plagal; each plagal mode is considered as the relative of the authentic mode, beginning a 4th above it. The final of a plagal is always made on the initial note of its related authentic mode. If the interpretation of the Greek modes is to be trusted, the Church modes seem to have arisen from a misunderstanding of the Greek modes.

Moderatamente (*mod-e-rah-tah-men'-teh*). Moderately.

Moderatissimo (*mod-e-rah-tis'-see-mo*). Very moderate.

Moderato (It.) (*mod-e-rah'-to*). Moderate.

Moderazione (It.) (*mo-deh-rat-se-o'-neh*), **con.** With moderation.

Modificazione (It.) (*mo-dee-fee-cat-se-o'-neh*). Modification; light and shade.

Modinha (Port) (*mo-deen'-ya*). Portuguese love-song.

Modo (It.). Mode; style.

Modulation. (1) Gradation of sound in intensity. (2) Change of key or tonality. Diatonic modulation moves from one key to another by means of chords from related keys; chromatic modulation, by means of chords from non-related keys; enharmonic modulation, by substituting ♯ for ♭, or the reverse. A passing or transient modulation is one followed by a quick return to the original key; the signature is not changed in a modulation of this kind. A final modulation is one in which the new key is retained for some time, or permanently; it is generally indicated by a change of signature following a double bar.

Modus (Lat.). Mode; scale.

Moll (Ger.) [Lat., *mollis,* soft]. Minor.

Moll-Akkord. Minor chord.

Moll-Tonart. Minor key or mode.

Moll-Tonleiter. Minor scale; literally, tone-ladder.

Molle (Lat.). Soft; mediæval name for B♭, B♮ being called B durum (hard). The German words for minor and major (*moll, dur*) are derived from these terms, also the French and Italian names for the flat sign, viz., French, *bémol;* Italian, *bemolle.*

Mollemente (It.) (*mol-leh-men-teh*). Softly; sweetly.

Molto (It.). Very much. **Di molto,** exceedingly; as Allegro di molto, exceedingly rapid.

Monferina (It.) (*mon-feh-ree'-nah*). Italian peasant dance in $\frac{6}{8}$ time.

Monochord [Gr., *monos,* one; *chorda,* string]. An instrument consisting of a single string stretched over a soundboard, on which is a graduated scale giving the proportionate divisions of the string required for the production of perfect intervals. A movable bridge is placed at the points indicated on the scale. The Monochord was formerly used as a means for training the ear. It is now used only for acoustic experiments.

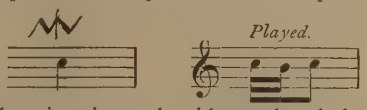
Monody. (1) A song for a single voice unaccompanied. (2) In modern usage it denotes a composition in which the melody is all-important, the remaining parts simply accompaniment; called also Homophony and Monophony—the antithesis of Polyphony.

Monotone. Recitative on a single sound.

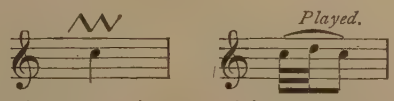
Montre (Fr.) (*mongtr*). Lit., displayed. The open diapason, so called because the pipes are generally placed in the front of the case and ornamented.

Morceau (Fr.) (*mor-so*). A "morsel"; a short piece; an extract.

Mordent, Mordente (It.), **Beisser** (Ger.). A sign indicating a single rapid stroke of the auxiliary note below the principal followed by a return to the principal. Thus:



When the sign is used without the dash through it, thus it is called an Inverted Mordent, or Pralltriller, and consists of the principal and the auxiliary note above. Thus:



The Mordent proper is not used in modern music, and the word Mordent is now by common usage applied to the inverted Mordent, or Pralltriller.

Morendo (It.) [from *morire, to die*]. Dying away; gradually growing softer and slower.

Morisca (It.). Morris dance.

Mormorando, Mormorevole, Mormorosa (It.). Murmuring.

Morris Dance. A rustic dance of Moorish origin.

Mosso (It.). Moved. **Piu mosso,** faster. **Meno mosso,** slower.

Mostra (It.). A direct , generally used in manuscript music to indicate an unfinished measure at the end of a brace.

Moteggiando (It.) (*mo-ted-jan'-do*). Bantering; jocose.

Motet, Motett, Motetto (It.). A vocal composition to sacred words in contrapuntal style. The madrigal differs only in being set to secular words. Many modern compositions to sacred words (not metric) are called motets, but would more properly be called anthems.

Motif (Fr.), **Motivò** (It.), **Motiv** (Ger.). Motive. (1) A short, marked musical phrase. (2) A theme for development. See *Leitmotiv.*

Motion, Moto (It.). **Conjunct Motion,** movement by degrees. **Disjunct Motion,** movement by skips. **Direct, Similar,** or **Parallel Motion,** when two parts ascend or descend together. **Contrary Motion,** when two parts move in opposite directions. **Oblique Motion,** when one part is stationary while the other moves.

Mouth. The opening in the front of an organ flue-pipe.

Mouth-organ. The harmonica; Pandean pipes.

Mouthpiece. In brass instruments the cup-shaped part applied to the lips in oboe, clarionet, etc., the part held between the lips. [Fr., *embouchure;* It., *imboccatura;* Ger., *Mundstück.*]

Movement, Mouvement (Fr.) (*move-mong*). (1) Tempo. (2) One of the members of a sonata, symphony, etc. (3) The motion of a part or parts.

Movimento (It.). Movement; tempo. **Doppio movimento,** double movement; when a change of time signature from $\frac{4}{4}$ to $\frac{4}{2}$ occurs, and it is desired to preserve the same rate of movement, or tempo, *i. e.,* the quarter-note beat becomes the half-note beat.

Munter (Ger.). Lively; brisk; allegro.

Murky. An old name for a piece of harpsichord music with a bass of broken octaves.

Musars. Troubadour ballad singers.

Musette (Fr.). (1) A bagpipe. (2) An old dance. (3) In the suite the second part or "trio" of the gavotte, etc., is frequently so called, and is written in imitation of bagpipe music. (4) A soft reed-stop in the organ.

Music, Musica (Lat. and It.), **Musique** (Fr.), **Musik** (Ger.) [from Gr., *mousike,* from *mousa, muse*]. Originally any art over which the Muses presided, afterward restricted to the art that uses sound as its material.

Music Box. An instrument in which steel tongues are vibrated by means of pins set in a revolving cylinder.

Musical Glasses. An instrument consisting of a number of goblets, tuned to the notes of the scale, vibrated by passing a wetted finger around the edge.

Musician. (1) One who makes a livelihood by playing, singing, or teaching music. (2) A member of a regimental or naval band. (3) A composer of music. "Musician" is a very elastic term; it includes every grade from the drummer and fifer to Mozart.

Musikant (Ger.). A vagabond musician.

Musiker, Musikus (Ger.). A musician. (Generally used in a derogatory sense.)

Mutation Stop. Any organ-stop not tuned to the diapason or any of its octaves, as the tierce, quint, twelfth, larigot, etc. Stops of this kind (also mixtures, cornets, sesquialteras) are used for the purpose of "filling up" the volume of tone and giving it greater brilliancy.

Mute [It., *sordino;* Fr., *sourdine;* Ger., *Dämpfer*]. A small contrivance of wood or metal placed on the bridge of the violin, etc., to deaden the sound; a cone or cylinder of pasteboard, leather, or wood placed in the bell of a brass instrument for the same purpose.

Mutig (Ger.) (*moo-tig*). Bold; spirited; vivace.

N

Nacaire (Fr.) (*nah-kehr'*). A large drum.

Nacchera (It.) (*nak-keh'-rah*). Military drum.

Nach (Ger.). After; according to; resembling.

Nach Belieben. At pleasure; ad libitum.

Nach und nach. By degrees; poco a poco.

Nachahmung. Imitation.

Nachdruck. Emphasis.

Nachlassend. Retarding.

Nachsatz. Closing theme; coda.

Nachspiel. Postlude.

Nachthorn (Ger.). Night-horn. An organ-stop; large-scale closed pipes, generally 8-foot tone.

Naïf (Fr.), masc. (*nah-if*), fem. **Naïve** (*nah-eve*). Simple; natural; unaffected.

Naiv (Ger.) (*nah-if*). See *Naïf.*

Naïvement (Fr.) (*na-eve-mong*). Artless.

Naïveté (Fr.) (*na-eve-teh*). Simplicity.

Naker. A drum. (Obsolete.)

Narrante (It.) (*nar-ran-teh*). Narrating. A style of singing in which especial attention is given to distinctness of enunciation, rather than to musical effect.

Nasard, Nazard, or **Nassat.** An organ-stop tuned a twelfth above the diapason.

Nason Flute. A soft, closed stop, 4-foot pitch.

Natural. A sign ♮ which restores a letter to its place in the natural scale. In the ancient system of music the only changeable note in the scale was B. The sign for that sound was ♭, the old form of the letter; it signified the sound we call B flat and was called B rotundum, *i. e.,* round B. When it was to be raised a half tone a line was drawn downward at the right side, thus ♮, and it was called B quadratum, *i. e.,* square B. In our modern music these have been retained as the signs for flat and natural.

Natural Horn or **Trumpet.** Those without valves or slides. The sounds produced are called natural harmonics, and are the same as may be produced by touching lightly a vibrating string at any point that will cause it to divide into equal parts, as 2, 3, 4, etc.

Natural Major Scale. The scale of C major.

Natural Minor Scale. A-minor; also any minor scale with unchanged 6th and 7th.

Natural Pitch. The sounds produced by flute, clarionet, etc., without overblowing. The flute, oboe, and bassoon overblow at the octave above their fundamental. The clarionet at the 12th.

Naturale (It.) (*nah-too-rah'-leh*), **Naturel** (Fr.) (*nah-too-rel'*). Natural; unaffected.

Neapolitan Sixth. A name given to a chord consisting of the subdominant with minor 3d and minor 6th, as F, A♭, D♭; used in both major and minor keys.

Neben (Ger.) (*neh'-ben*). Subordinate; accessory.

Neben-Dominant (Ger.). The dominant of the dominant.

Neben-Gedanken (Ger.). Accessory themes.

Nebensatz (Ger.). An auxiliary theme in sonata, etc.

Nebenwerk. The second manual of the organ.

Neck [Ger., *Hals;* Fr., *manche* (mongsh)]. The "handle" of violin, guitar, etc.; on its top is the fingerboard; at its end, the peg-box.

Negli (It.) (*nehl-yee'*), **Nei, Nel, Nell, Nella, Nelle, Nello.** In the manner of.

Negligente (It.) (*neg-lee-gen'-teh*). Careless.

Negligentimente (It.) (*neg-lee-gen-te-men-teh*). Carelessly.

Negligenza (*neg-lee-gent-sa*), **con.** With carelessness.

Nel battere (It.) (*bat-teh-reh*). At the beat.

Nel stilo antico. In the antique style.

Nenia or **Nænia** (Lat.). A funeral dirge.

Nettamente (It.) (*nett-a-men-teh*). Neatly; clearly.

Netto (It.). Neat; exact.

Neuma, Neumes. Signs used in mediæval notation.

Nineteenth. An organ-stop; two octaves and a fifth above the diapason.

Ninth. An interval one degree beyond the octave, being the second removed an octave; it may, like the second, be minor, major, or augmented. The minor and major ninths are essential dissonances, that is, sounds derived from the fundamental; with the augmented ninth the lower sound is really the ninth, thus, G, B, D, F, A or A♭, are overtones of G, but C, D♯, F♯, A, C, chord of ninth. A chord consisting of root major 3, perfect 5, minor 7, and major or minor ninth may have either major or minor ninth in major keys, but only the minor ninth in minor keys.

Nobile (It.) (*no-bee-leh*). Noble; grand.

Nobilita (It.) (*no-bee'-lee-ta*), **con.** With nobility.

Nobilmente (It.) (*no-bil-men-teh*). Nobly.

Noch (Ger.). Still; yet; as, **noch schneller,** still faster.

Nocturne (Fr.) (*noc-toorn*), **Notturno** (It.), **Nachtstück** or **Nokturne** (Ger.) (*nok-toor'-neh*). Literally, night-piece; a quiet, sentimental composition, usually in Lyric form, but under the title Notturno important compositions for several instruments or full orchestra have been written containing several movements.

Nocturns. Night services in the R. C. Church, at which the psalms are chanted in portions, also called nocturns.

Node. A line or point of rest in a vibrating body. A node may be produced in a vibrating string by touching it lightly. (*Cf.* under Natural Horn.) The sounds thus produced, called harmonics, are often used on instruments of the violin family and on the harp.

Noël (Fr.) (*no-el*), **Nowell** (Eng.). "Good news"; "Gospel." Christmas eve songs or carols.

Noire (Fr.) (*no-ar*). Black; quarter note.

Nonet [It., *nonetto;* Ger., *Nonett*]. A composition for nine voices or instruments.

Nonuplet. A group of nine notes to be played in the time of six or eight of the same value.

Normal Pitch. The pitch of a sound, generally A or C, adopted as a standard. This standard for the sound A, second place, has varied from 404 vibrations per second in 1699 to 455 in 1859. By almost universal consent the modern French pitch is now adopted, viz., A = 435 vibrations per second.

Notation. The various signs used to represent music to the eye, as staff, clefs, notes, rests, etc. The earliest attempts at the representation of musical sounds of which we have any knowledge were made by the Greeks, who used the letters of their alphabet, modified in various ways to represent the series of sounds they employed. Their series of sounds is supposed to have begun on the note A, first space in the bass clef. From this system music has retained the name of A for this sound. The next development was the adoption of a series of signs called neumæ. These signs, although curiously complicated, were yet very defective in precision, being inferior to the letters as indications of pitch. The great want, both of the letter system and the neumæ, was that neither gave any indication of the duration of the sounds. The next step was the adoption of the staff. At first use was made only of the spaces between the lines, and, as notes had not yet been invented, the syllables were written in the spaces; this gave exactness to the relative pitch of the sounds but no indication of their duration. The next step was to use the lines only, indicating the sounds by small square notes called points. The letter names of the lines, of which eight was the number, were indicated by Greek letters placed at the beginning. This, though an improvement on the plan of dislocating the syllables, was still wanting in that no duration was indicated. This desideratum was secured by the invention of the notes, attributed to Franco of Cologne. Invention was now on the right track. The expression of pitch and relative duration were now determined with exactness. The system of notation now in use is substantially the same, modified and improved to meet the requirements of modern musical complexity.

Note. A sign which, by its form, indicates the relative duration of a sound, and by its position on the staff the pitch of a sound.

Notenfresser (Ger.). "Note devourer." A humorous title for a ready sight-reader; generally implies one whose playing is more notes than music.

Nourri (Fr.) (*nour-ree*). Nourished; *un son nourri,* a well-sustained sound. Generally applied to vocal sounds.

Novelette. A name invented by Schumann and given by him to a set of pieces without formal construction, with numerous constantly changing themes, giving expression to a very wide range of emotions.

Novemole (Ger.) (*no-veh-mo'-leh*). Nonuplet.

Nuance (Fr.) (*noo-ongs*). Shading; the variations in force, quality, and tempo, by means of which artistic expression is given to music.

Number. (1) A movement of a symphony or sonata. (2) A solo, chorus, or other separate part of an opera or oratorio, etc. (3) A given piece on a concert programme. (4) The "opus" or place in the list of an author's works as to order of composition.

Nunsfiddle [Ger., *Nonnen-Geige*]. Called also Tromba Marina. An instrument with a distant resemblace to a double bass, furnished with one string and a peculiarly constructed bridge. The harmonic sounds only are used. It gets its name from the fact that it was formerly used in Germany and France in the convents to accompany the singing of the nuns.

Nuovo (It.) (*noo-o'-vo*), **Di nuovo.** Over again; repeat.

Nut [Ger., *Sattel,* saddle; Fr., *sillet,* button; It., *capo tasto,* head-stop]. (1) The ridge at the end of the fingerboard next the peg-box; its purpose is to raise the strings slightly above the fingerboard of instruments of violin and guitar families. (2) [Ger., *Frosch,* frog; Fr., *talon,* heel]. The piece at the lower end of violin bow, etc., in which the hair is inserted and tightened or slackened by means of a screw.

O

O (It.). Or; also written **od.**

Ob. Abbreviation of oboe and obbligato.

Obbligato (It.) (*ob-blee-gah'-to*). An essential instrumental part accompanying a vocal solo.

Ober (Ger.) (*o'-behr*). Over; upper.

Oberwerk. The uppermost manual of an organ.

Obligé (Fr.) (*o-blee-zheh*). Obbligato.

Oblique Motion. When one part is stationary while the other ascends or descends.

Oboe (It.) (*o-bo-eh*), plural, oboi (*o-bo-ee*); (Fr.) **Hautbois** (*ho-boa*); (Eng.) **Hautboy** or **Hoboy** [from the French word which means, literally, "high-wood"]. A wind instrument with double reed, formerly the leading instrument in the orchestra, filling the place now taken by the violins. A pair are generally employed in the modern orchestra. The oboe is one of the most ancient and widely disseminated of musical instruments. It is the general opinion of students of antiquity that many of the instruments called by the general name "flute" by the Greeks were oboi.

Oboe. A reed-stop in the organ, of 8-ft. pitch, voiced to resemble the oboe.

Oboe d'amore (It.) (*dah-mo'-reh*). Oboe "of love"; a small soft-toned oboe.

Oboe di caccia (It.) (*cat'-cheea*). Oboe of the chase; a large oboe, used formerly as a hunting signal.

Oboist, Oboista (It.). An oboe player.

Ocarine, Ocarina (It.). A small wind instrument of terra cotta, with flute-like quality of tone,—more of a toy than a musical instrument.

Octave, Ottava (It.), **Oktave** (Ger.). (1) The interval between a given letter and its repetition in an ascending or descending series. The diapason of the Greeks. (2) An organ-stop of 4-ft. pitch.

Octave Flute. The piccolo.

Ottava bassa. An octave lower than written; the sign: 8va Ba

Ottava alta (It.). At the octave above; indicates that the passage is to be played an octave higher than written, indicated by the sign: 8va

A return to the natural position of the notes is signified by the word *loco* (place), or frequently by the cessation of the dotted line, thus: 8va

Octet, Octuor, Ottetto (It.), **Oktett** (Ger.), **Octette** (Fr.). A composition for eight solo voices or instruments.

Octo basse (Fr.). A large double bass going a third lower than the ordinary instrument, furnished with a mechanism of levers and pedals for stopping the strings—an important addition to the orchestra.

Octuplet. A group of eight notes played in the time of six of the same value.

Ode Symphonie (Fr.). Choral symphony.

Odeon (Gr.), **Odeum** (Lat.). A building in which public contests in music and poetry were held. In modern use as a name for a concert-hall or theater.

Oder (Ger.). Or.

Œuvre (Fr.) (*oovr*). Work; opus.

Offen (Ger.). Open.

Offertory, Offertorio (It.), **Offertoire** (Fr.) (*of-fer-twar*), **Offertorium** (Ger. and Lat.). (1) The collection of the alms of the congregation during the communion service. (2) The anthem or motet sung by the choir at this time. (3) A piece of organ music performed during this time.

Ohne (Ger.) (*o'-nch*). Without, as ohne Ped., without pedal.

Olio [Sp., *olio*, from Lat., *olla*, pot. A mixture of meat, vegetables, etc., stewed together]. Hence, a medley of various airs; a potpourri.

Olivettes (Fr.) (*o-lee-vet*). Dance after the olive harvest.

Omnes or **Omnia** (Lat.). All. Same as *Tutti.*

Omnitonic, Omnitonique (Fr.). All sounding, *i. e.*, chromatic; applied to brass instruments.

Ondeggiamento (It.) (*on-ded-ja-men'-to*), **Ondeggiante** (It.) (*on-ded-jan'-teh*), **Ondulation** (Fr.) (*on-doo-lah-siong*), **Ondulé** (Fr.) (*on-doo-leh*), **Ondulieren** (Ger.) (*on-doo-lee'-ren*). Waving, wavy; undulating; tremolo.

Ongarese (It.) (*on-gah-reh'-seh*). Hungarian.

Open Diapason. See *Diapason.*

Open Harmony. An equidistant arrangement of the notes of the chords.

Open Notes. (1) The sounds produced by the strings of a violin, etc., when not pressed by the finger. (2) The natural sounds of horn, trumpet, etc., *i. e.*, without valves.

Open Pipe. An organ-pipe without stopper.

Open Score. One in which each voice or instrument has a separate staff assigned to it.

Open Strings. See *Open Notes* (1).

Opera (It.) [from Lat., *opus, work*]. A combination of music and drama in which the music is not merely an incidental, but the predominant element. The opera originated in an attempt to revive what was supposed to be the manner in which the classic Greek drama was performed. The efforts of the group of musical enthusiasts who made this attempt culminated in the production of "Euridice," in 1600, the first Italian opera ever performed in public. The ground being broken, new cultivators soon appeared, and the new plant grew rapidly. Peri, the composer of "Euridice," was succeeded first by Gagliano, then by Monteverde—one of the great names in music. In his hands the opera developed with extraordinary rapidity. Before the close of the 17th century a host of opera writers appeared, led by Scarlatti. The next important development in the form of opera was made by Lulli, the court musician of Louis XIV. No very striking advance was now made until Handel appeared. He did little in the way of developing the form, but infused so much genius into the received form that it gave it a new life. In this respect Handel resembled Mozart, who, at a later stage of the development of the opera, was quite satisfied to take the then received form, which his genius sufficed to make immortal. The first decided departure from the traditional form was made by Gluck, whose theory of dramatic music is strongly akin to the modern theory of Wagner. The opera since Mozart has grown with so much luxuriance, in such a diversity of forms, that even a slight sketch of it would be impossible in our limits. Appended will be found the names of the principal varieties.

Opera Buffa. Comic opera. (Fr., *Opéra Bouffe.*)

Opéra Comique (Fr.). Comedy (not comic) opera.

Opera drammatica (It.). Romantic opera. In modern German usage the term "Musikdrama" has been adopted to distinguish the modern from the old form of opera.

Opera Seria. Grand opera; serious opera; tragic opera.

Operetta (It.). An opera with spoken dialogue.

Ophicleide, Oficleide (It.) [from Gr., *ophis*, snake, and *kleis*, key. Lit., "keyed snake," in allusion to its contorted shape]. A large brass instrument of the bugle family, *i. e.*, with keys, now little used. The best example of its use by a great composer will be found in Mendelssohn's "Midsummer Night's Dream" music.

Oppure (It.) (*op-poo'-reh*). See *Ossia.*

Opus (Lat.). Work; used by composers to indicate the order in which their works were written.

Oratorio (It.) [from Lat., *oratorius,* pertaining or belonging to prayer; a place for prayer]. A composition consisting of solos and concerted pieces for voices, the theme of which is taken from the Bible or from sacred history. The name arose from the fact that St. Philip Neri gave discourses intermingled with music in his oratory about the middle of the 16th century. The term Oratorio is also used for secular works written on the same plan, such as Haydn's "Seasons," and Bruch's "Odysseus," but is manifestly inappropriate. The oratorio is descended from those middle-age dramatic performances founded on biblical or moral themes, known as mysteries, moralities, or miracle plays. It took its rise about the same time as the opera, from which it differs chiefly in that it affords an opportunity for the highest developments of the contrapuntal art, whereas the opera is essentially monodic. The oratorio has not gone through the manifold changes and diversities that have marked the development of the opera, nor has it attracted anything like the number of composers that have devoted themselves to the opera. The first writer of any prominence in this field was Carissimi. He was followed by A. Scarlatti; then Handel appeared and stamped for all time the form of the oratorio. His great contemporary, Bach, equaled if he did not surpass him, but in a different style. Handel has had but two successors worthy to be named with him—Haydn and Mendelssohn, each of whom has stamped a new character on the oratorio without descending from the high plane on which this class of composition should stand. The taste for the oratorio seems to be on the wane, as no composer of any mark has of late years devoted his attention to it.

Orchestra, Orchestre (Fr.), **Orchester** (Ger.) [from Gr., *orchester,* a dancer]. Originally the place where the dancing took place in the Greek theater. (1) The place where the instrumentalists are placed. (2) The company of instrumentalists. (3) The collection of instruments used at any performance. See *Instrument.*

Orchestrate. To write music for the orchestra.

Orchestration. The art of writing for the orchestra.

Orchestrion. A mechanical organ designed to imitate, by means of various stops, the instruments of the orchestra.

Ordinario (It.) (*or-dee-nah'-ree-o*). Usual; ordinary; as tempo ordinario, the usual time, used in the sense of moderate.

Organ, Organo (It.), **Orgue** (Fr.), **Orgel** (Ger.) [from Gr., *organon,* tool, implement, instrument]. An instrument consisting of a large number of pipes grouped according to their pitch and quality of tone into "stops." A large bellows supplies the compressed air or "wind" to the various air-tight boxes called sound-boards, on which the pipes are placed. By means of a key mechanism the "wind" is allowed to enter the pipes corresponding to any given pitch at will. The set or sets of pipes it is desired to sound are controlled by means of "registers," which, when drawn, allow the "wind" to enter the pipes of the "stop," the name of which is marked on the knob of the register. Organs are built with from one to four, and even more, "manuals," or keyboards, placed one above the other. Three manuals is the usual number. The lowest is called the "choir organ," the middle the "great organ," the upper the "swell organ." When a fourth manual is added it is called the "solo manual," a fifth the "echo organ"; there is also a keyboard for the feet called the "pedal organ."

Organ Point, Point d'orgue (Fr.), **Orgelpunkt** (Ger.). A succession of harmonies belonging to the key, written over a prolonged holding of the dominant or tonic, or both; an organ point is generally at the bass.

Organetto (It.). Small organ; bird-organ.

Organum (Lat.), **Organon** (Gr.). An early attempt at part-writing in which the parts moved in fourths or fifths with each other.

Orguinette. A small mechanical reed-organ.

Orpharion. A lute with wire strings.

Osservanza (It.) (*os-ser-van'-tsa*), **con.** With care; with exactness.

Ossia (It.) (*os'-see-a*). Or else; otherwise; as ossia piu facile, or else more easily.

Ostinato (It.) (*os-tee-nah'-to*). Obstinate. **Basso ostinato** is a name given to a frequently repeated bass with a constantly varied counterpoint, called also ground bass; frequently used by the old composers as the foundation for the passacaglio.

Otez (Fr.) (*o-teh*). Take off; a direction in organ music to push in a given register.

Ottavino (It.) (*ot-ta-vee-no*). The piccolo.

Ottavo (It.). See *Octave.*

Ottetto (It.). See *Octet.*

Ou (Fr.) (*oo*). See *Ossia.*

Ouvert (Fr.) (*oo-vehr*). Open. See *Open Notes.* **A livre ouvert,** literally, "at open book"; at sight.

Overblow. To blow a wind instrument in such a manner as to make it sound any of its harmonics. In the organ a pipe is overblown when the air-pressure is too great, causing it to sound its octave or twelfth.

Overspun. Said of strings covered with a wrapping of thin wire.

Overstring. Arranging the stringing of a piano in such a way that one set crosses the rest diagonally.

Overtone. The sounds produced by the division of a vibrating body into equal parts.

Overture, Overtura (It.), **Ouverture** (Fr.), **Ouverture** (Ger.). A musical prelude to an opera or oratorio. Independent compositions are also written under the name of concert overtures, generally with some descriptive title. In its highest form the overture is developed in the sonata form without repeating the first part. Many overtures are nothing but a medley of airs in various tempos.

Ovvero. See *Ossia.*

P

P. Abbreviation for piano. Soft (positive degree).

PP. Abbreviation for piu piano. Softer (comparative degree).

PPP. Abbreviation for pianissimo. Softest (superlative degree).

P. F. Abbreviation for pianoforte (when capital letters are used). **p. f.** Abbreviation for poco forte, a little loud; or piu forte, louder. In French organ music **P.** signifies posatif, *i. e.,* choir-organ.

Padouana (It.) (*pah-doo-ah'-nah*), **Paduana, Padovana, Padovane** (Fr.) (*pah-do-van*). See *Pavan.*

Pæan (Gr.). A song of triumph, originally in praise of Apollo.

Paired Notes. A succession of thirds, sixths or eighths on the piano.

Palco (It.). The stage of a theater.

Pallet. The valve that controls the admission of "wind" to the pipes of the organ, harmonium, etc.

Pallettes (Fr.). The white keys of the piano, etc. The black keys are called *feintes* (faints).

Pandean Pipes or **Pan's Pipes.** The syrinx; a series of small pipes made from reeds, sounded by blowing across the open top. An instrument of unknown antiquity and universal use. The ancient Peruvians carved them out of stone. The Fijians and the South American Indians make them with a double set of pipes—one set open, the other closed at one end, thus producing octave successions.

Pantalon (Fr.). One of the numbers in a set of quadrilles. The old set of quadrilles consisted of five or six numbers called: (1) pantalon; (2) été; (3) poule; (4) pastourelle; (5) finale. If there were six, the other was called trénis.

Parallel Keys. The major and minor scales beginning on the same keynote.

Parallel Motion. When two parts or voices ascend or descend together.

Paraphrase. An elaborate arrangement of a piece of music for the piano, originally written for the voice, or for some other instrument. An orchestral paraphrase is a like arrangement of a vocal or pianoforte composition.

Parlando, Parlante (It.) (*par-lan'-do, par-lan'-teh*). Declaiming; singing in recitative style; playing in imitation of vocal recitative.

Part. (1) The series of sounds allotted to a single voice or instrument, or a group of voices or instruments of identical kind in a musical composition. (2) One of the counterpoints of a polyphonic composition for piano or organ, as a three- or four-part fugue. (3) One of the divisions of an extended form as indicated by double bars.

Part-Song. A composition for equal or mixed voices, unaccompanied, consisting of a melody to which the other parts are subordinated, in this respect differing from the glee and madrigal, which are contrapuntal, *i. e.*, all the parts are of equal importance.

Part-Writing. Counterpoint.

Partial Tones. See *Overtone.*

Partita (It.) (*par-tee'-tah*). See *Suite.*

Partition (Fr.) (*par-tee'-syong*), **Partitur** (Ger.) (*par-tee-tour'*), **Partitura** (It.) (*par-tee-too'-rah*), **Partizione** (It.) (*par-teetz-eo'-neh*). [From It., *partire,* to divide.] In allusion to the division by bars of the page; in English "scoring"; an orchestral or vocal score.

Paspy [from Fr., *passepied*], **Passamezzo** (It.) (*passa-med'-so*). A dance resembling the minuet, but more rapid in its movement.

Passacaglio (It.) (*pas-sa-cal'-yo*), **Passacaglia** (*pas-sa-cal'-ya*), **Passecaille** (Fr.) (*pass-ca-ee*), **Passe-rue** (Fr.) (*pass-roo*), **Passa-calle** (Sp.) (*pas-sa-cal'-leh*), **Gassenhauer** (Ger.) (*gas-sen-how-er*). Literally, "running the street." An old dance in triple time, generally written on a ground bass.

Passage. (1) A musical phrase. (2) The figure of a melodic sequence. (3) A brilliant run or arpeggio.

Passaggio (It.) (*pas-sad'-jeo*). Passage.

Passing Note. An ornamental melodic note foreign to the harmony; when these notes fall on the beat or the accent they are called changing notes.

Passione (It.). Passion-music; a musical setting of the closing scenes in the life of the Saviour in the form of an oratorio, originally with dramatic action. The Oberammergau passion-play is a survival of this custom.

Passione (It.) (*pas-se-o'-neh*), **Passionato** (It.) (*nah-to*), **Passionatamente** (It.), **Passioné** (Fr.) (*pas-si-o'-neh*), **con.** With passion; intensity; impassioned; with intense passion.

Pasticcio (It.) (*pas-tit'-che-o*), **Pastiche** (Fr.) (*pas-tish*). A "composition" made up of airs, etc., borrowed from different sources.

Pastoral, Pastorale (It.) (*pas-to-rah'-leh*). (1) A rustic melody in $\frac{6}{8}$ time. (2) Used to designate an extended composition intended to portray the scenes and emotions of rustic life, as pastoral symphony, pastoral sonata.

Pastorella (It.) (*pas-to-rel'-lah*), **Pastorelle** (Fr.) (*pas-to-rel*). A little pastoral.

Pastourelle. A figure in the quadrille. See *Pantalon.*

Pateticamente (It.) (*pa-teh-tee-cah-men'-teh*), **Patetico** (It.) (*pa-teh'-tee-co*), **Pathétiquement** (Fr.) (*pa-teh-teek-mong*), **Pathétique** (Fr.) (*pa-teh-teek*). Pathetic; pathetically.

Patimento (It.) (*pah-tee-men-to*). Suffering. **Con espressione di patimento,** with an expression of suffering.

Patouille (Fr.) (*pah-too-ee*). Claquebois; xylophone.

Pauke (Ger.) (*pow-keh*), pl., **Pauken.** Kettle-drum.

Pausa (It.) (*paw-sa*), **Pause** (Fr.) (*paws*). A rest or pause; a bar's rest.

Pavan. A stately dance in $\frac{4}{4}$ time. The name is derived either from *pavo,* a peacock, in allusion to its stately character, or from *pavana,* the abbreviated form of *Padovana,* the Latin name of Padua, where the dance is said to have originated.

Pavana (It.), **Pavane** (Fr.). Pavan.

Paventato (It.) (*pa-ven-tah'-to*), **Paventoso** (*pa-ven-to-so*) [from Lat., *pavidus,* fearing]. Timid; with fear; timidly.

Pavillon (Fr.) (*pa-vee-yong*). The bell of a horn, clarionet, etc.

Pavillon chinois (*shee-no-a*). A staff of small bells. **Flute à pavillon,** an organ-stop with "bell-mouthed" pipes.

Pedal, abbreviated **Ped.** [from Lat., *pes,* a foot]. (1) Any mechanism controlled by the foot; in the piano, the contrivance for raising the dampers; also that for shifting the action (una-corda). In square and upright pianos, the soft pedal, when depressed, interposes small strips of soft leather between the hammers and strings. The sostenuto pedal is a contrivance by means of which one or more sounds in the lower register of the piano may be prolonged at will. In the organ, the keyboard for the feet, the levers for opening and closing the swell (swell pedal) and for operating various groups of stops (combination pedals).

Pedal Check. A mechanism in the organ, controlled by a hand-knob, which prevents the movement of the pedals **Crescendo Pedal,** a mechanism in the organ by means of which the full power may be put on or off. **Balancing Swell Pedal** is one that remains in whatever position it may be when the foot leaves it.

Pedal Harp. The mechanical contrivances by means of which certain strings are tightened or slackened to change the key, as F♯-ped., B♭-ped., etc.

Pedal Pipes. The organ-pipes sounded by the pedal keyboard.

Pedal Point or **Organ Point.** See *Organ Point.*

Pédale (Fr.). Pedal.

Pedale doppio (It.) (*peh-dah'-leh dop'-yo*). Pedal in octaves; organ music.

Pedalflügel (Ger.). A grand piano with pedal keyboard.

Peg. The wooden or metal pins around which one end of the strings of the violin, etc., are wound, by turning which the pitch of the strings is raised or lowered; in the pianoforte they are generally called pins.

Pensieroso (It.) (*pen-see-eh-ro'-so*). Pensive; thoughtful.

Pentatone. An interval of five whole tones; augmented 6th.

Pentatonic Scale. See *Scale.*

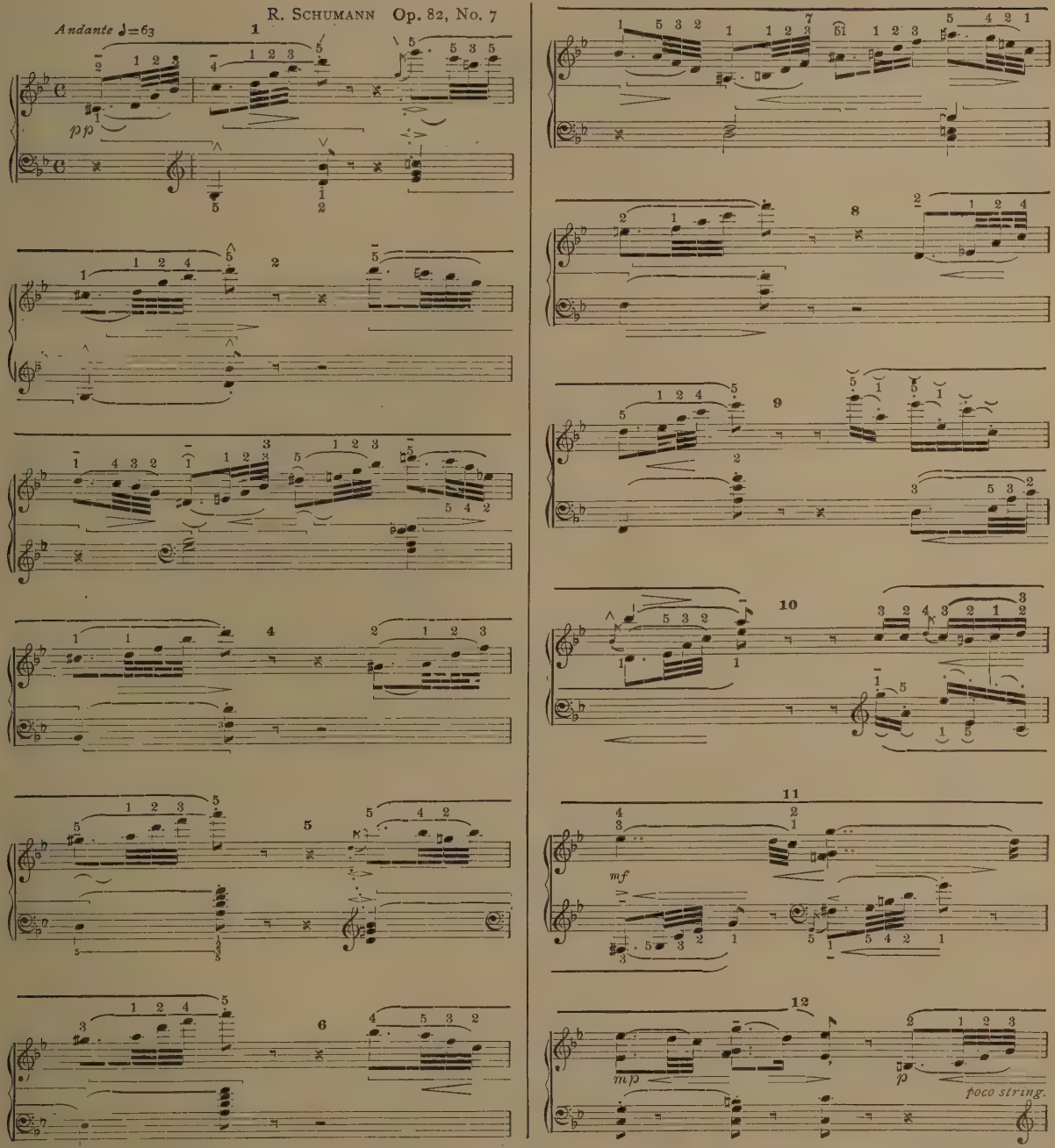
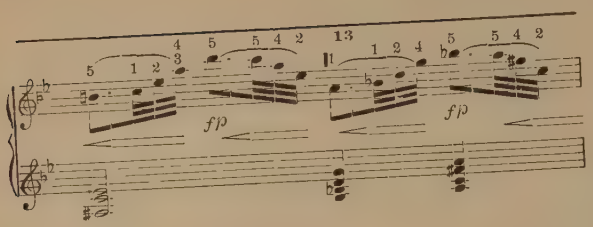
Per (It.) (*pehr*). For, or by; as, **Per il violino,** for the violin.

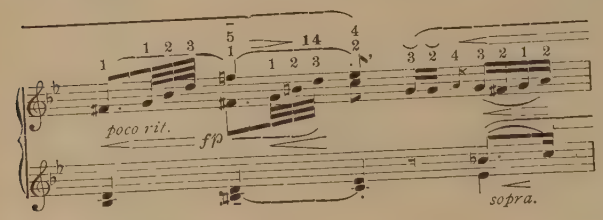
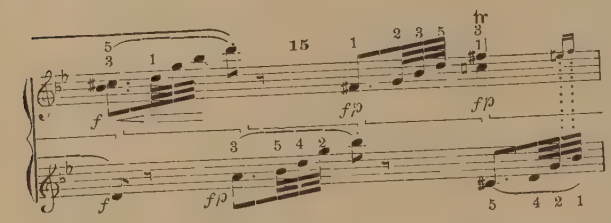
Percussion Stop. A hammer which, striking the reed of a harmonium or organ-pipe, causes it to vibrate promptly when the key is depressed.

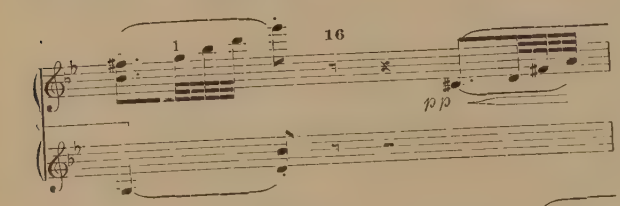
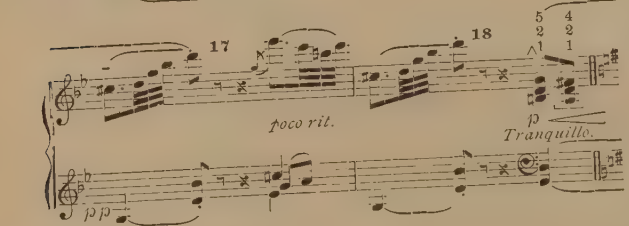
VOGEL ALS PROPHET

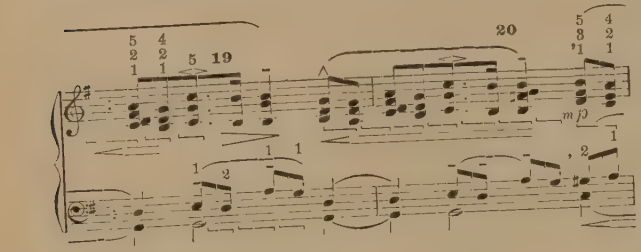
THE BIRD'S PROPHECY

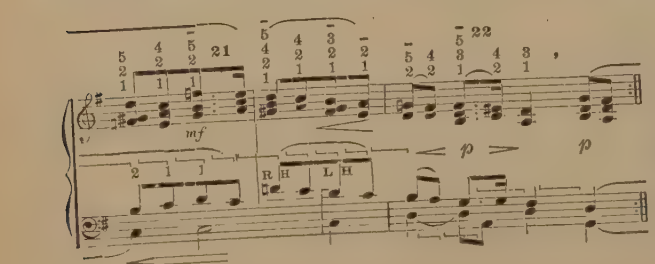
EDITED BY WILLIAM H. SHERWOOD

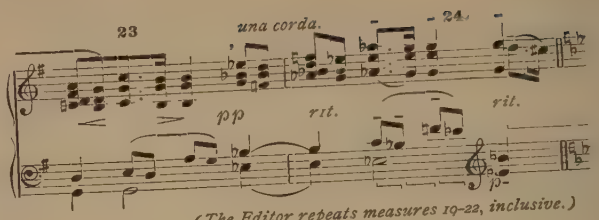
R. SCHUMANN Op. 82, No. 7













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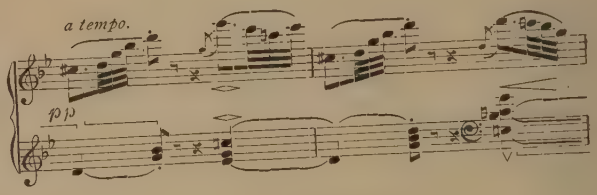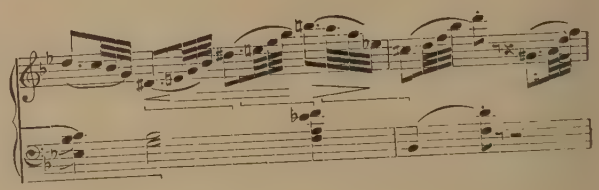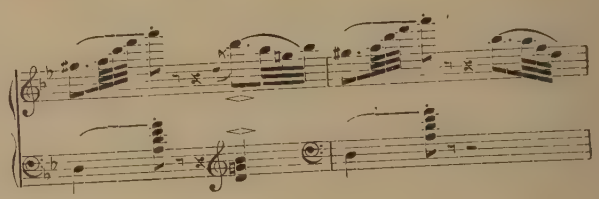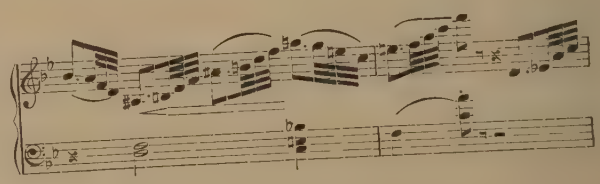

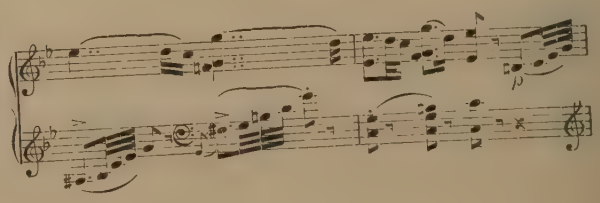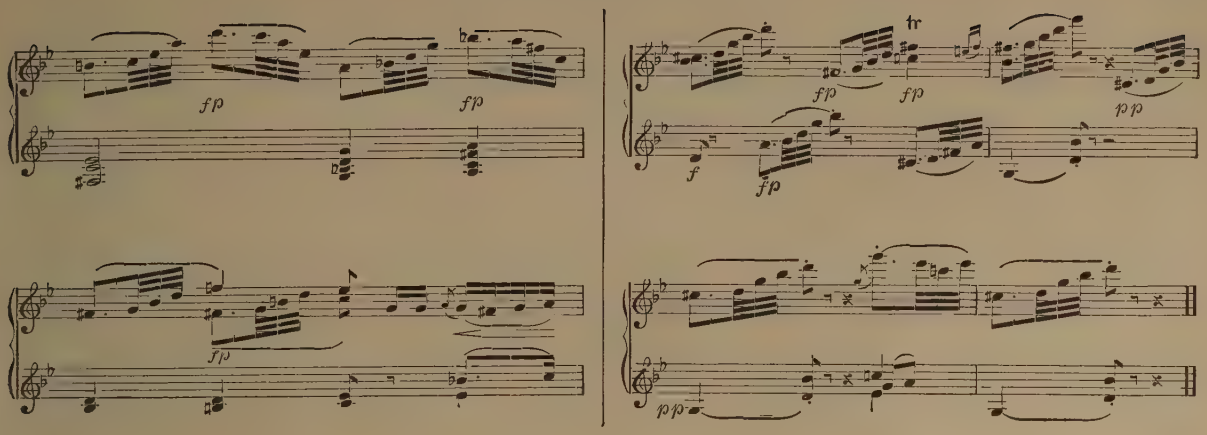

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Percussive Instruments. Drums, cymbals, triangles, etc.

Perdendo (It.) (*pehr-den'-do*), **Perdendosi** (*pehr-den-do'-see*) [from *perdere,* to lose]. Gradually dying away, both in speed and power. (Abbr., Perd. or Perden.)

Perfect Cadence. See *Cadence.*

Perfect Concord. Root, minor or major 3d, and perfect 5th.

Perfect Consonances. See *Interval.*

Périgourdine (Fr.) (*peh-ree-goor-deen*), **Périjourdine** (*peh-ree-zhoor-deen*). An old French dancing-song in $\frac{3}{4}$ time.

Period, Période (Fr.) (*peh-ree-ode*), **Periodo** (It.) (*peh-ree-o-do*). A completé musical sentence, generally eight measures.

Perlé (Fr.) (*per-leh*), **Perlend** (Ger.), "Pearled," like a string of pearls. A metaphorical expression for a clear, delicate execution; also a direction that the passage is to be played in a "pearly" manner.

Pesante (It.) (*peh-san'-teh*). Heavy; weighty.

Petite (Fr.) (*peh-teet*). Small; little.

Petite Flute. The piccolo.

Petite mesure à deux temps. $\frac{2}{4}$ time.

Petite Pedale. Soft pedal in organ music.

Petites Notes. Grace notes.

Petto (It.). Chest.

Peu à peu (Fr.). (This sound cannot be reproduced in English; it resembles *oo,* but is not so broad.) Little by little; by degrees.

Pezzi (It.) (*pet-see*). Pieces.

Pezzi concertanti. (1) Concerted pieces. (2) A "number" of an opera, concert, etc.

Pezzi di bravura (*bra-voo-ra*). Showy, brilliant pieces.

Pezzo (It.) (*pet'-so*). A piece; phrase. Beethoven uses the following sentence as a direction in one of his pianoforte sonatas: "Questo pezzo si deve trattare con piu gran delicatezza"—Every phrase must be treated with the greatest delicacy.

Pfeife (Ger.) (*pfei-feh*). Pipe; fife.

Phantasie (Ger.). See *Fantasia.*

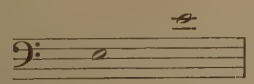
Phantasieren (Ger.) (*fan-ta-see'-ren*). To improvise.

Phantasiestück. A piece devoid of form.

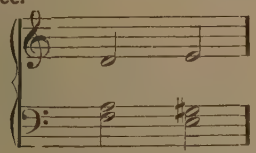
Phrase. Technically, an incomplete musical sentence.

Phrasing. The art of dividing a melody into groups of connected sounds so as to bring out its greatest musical effect, including also the placing of accent—cres. and decres., rall. and accel., rubato, etc.—and in pianoforte music, the varieties of touch. In vocal music, it refers chiefly to the breathing places; in violin music, to the bowing.

Phrygian Mode. One of the Greek scales, generally supposed to be E—E. In the ecclesiastical scales, the octave scale from



Phrygian Cadence.



Physharmonica. (1) The predecessor of the melodeon. (2) A free reed-stop in the organ.

Piacere, à (It.) (*pe-aht-cheh'-reh*). At pleasure, *i. e.,* the tempo at the will of the performer.

Piacevole (It.) (*pe-aht-cheh'-vo-leh*). Smoothly; quietly.

Piacevolezza (It.) (*pe-aht-cheh-vo-let'-za*), **con.** With smoothness.

Piacevolmente (It.) (*pe-aht-cheh-vol-men'-teh*). Smoothly.

Piacimento (It.) (*pe-aht-chee-men'-tō*). See Piacere.

Pianette (Fr.), **Pianino** (It.) (*pee-ah-nee-no*). A small piano; upright piano.

Piangendo (It.) (*pee-an-jen'-do*), **Piangevole** (*pee-an-jeh'-vo-leh*), **Piangevolmente** (*pee-an-jeh-vol-men'-teh*). "Weeping"; plaintively wailing.

Piano (It.) (*pee-ah'-no*). Soft. (Abbreviation, **P.**; pianissimo, **PP.**)

Pianoforte (It.) (*for'-teh*). In common usage, piano, without the forte. An instrument strung with steel wire (formerly brass wire was largely used), provided with a keyboard; the depression of the keys causes the hammers to strike the strings. The name pianoforte was given to it because the volume of sound was under the control of the performer. Three forms of pianoforte are made: The grand piano [in Fr., *piano à queue,* lit., "piano with a tail"; Ger., *flügel,* in allusion to its wing shape]; the square, and the upright. The pianoforte is descended from the dulcimer in the same sense that the harpsichord is descended from the psalterion. In form the dulcimer and psalterion were identical, differing only in that the former was played by means of hammers, the latter by means of "plectra." The adaptation of mechanism to control the hammers developed the piano out of the dulcimer, and the adaptation of mechanism to control the "plectra" developed the harpsichord out of the psalterion. The hammer action was first made practically effective by Cristofori of Padua, in 1711. About the same time an English monk, "Father Wood," made one in Rome. This instrument came into the possession of the celebrated Fulke Greville, and became well known as Mr. Greville's pianoforte. In 1717, a German youth of eighteen, named Schröter, invented the pianoforte independently; his invention was copied by Silberman of Strasburg, who submitted two of his instruments to Bach, who liked the mechanism but not the tone, preferring that of the clavichord. The growth of the pianoforte has been rapid since the beginning of the nineteenth century, and has reached a point beyond which it hardly seems possible to advance.

Piatti (It.) (*pe-at'-tee*). Cymbals.

Pibroch. A sort of fantasia for the bag-pipe of the Scotch Highlanders; supposed to represent the incidents of a fight.

Piccolo. A small flute an octave higher than the ordinary flute; a 2-foot organ-stop.

Piccolo-piano. A small upright pianoforte.

Picco-pipe. A small instrument resembling a flageolet; gets its name from an Italian peasant, Picco, who produced astonishing results from it.

Piece. A composition; a single instrument, as, "a band of twenty pieces."

Pièce (Fr.) (*pee-ace*). A member of a suite, *q. v.*

Pieno (It.) (*pe-eh'-no*). Full.

Pietoso (It.) (*pe-eh-to'-so*), **Pietosamente** (*pe-eh-to-sa-men'-teh*). Tender; pitiful; tenderly.

Pifferaro (It.) (*pif-feh-rah-ro*). A player on the piffero.

Piffero or **Piffaro** (It.). Old form of the hautboy, still used in Italy. The same form of instrument exists all through Asia—probably the *"aulos"* of the Greeks.

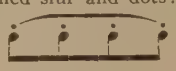
Pincé (Fr.) (*pang-seh'*). (1) Pinched. See *Pizzicato.* (2) A mordent.

Pipe. The tubes of wood or metal in the organ. They are classified as follows: Open pipes, open at the top; closed or stopped pipes, with a movable plug; flue pipes, those constructed on the principle of the whistle or flageolet; reed pipes, those in which a beating reed is combined with the pipe. Pipes are also classified by length, the open diapason

being the standard. An open pipe must be eight feet long to sound

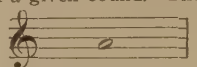
A closed pipe four feet long gives the same sound; both are said to have an 8-foot tone. If a pipe has a 4-foot tone, its sound is an octave higher than the diapason; if a 2-foot tone, it is two octaves above the diapason.

Piqué (Fr.) (*pee-keh'*). A manner of bowing the violin, indicated by combined slur and dots:



Piquieren (Ger.) (*pik-ee'-ren*). To play piqué.

Piston (Fr.), **Ventil** (Ger.). Valve; a device used in brass instruments to lengthen the tube, thus depressing the pitch.

Pitch. Relative pitch is the interval between a given sound and some other sound. Absolute pitch is the number of vibrations per second necessary to produce a given sound. Standard pitch is the number of vibrations per second adopted as the pitch of a given sound. The standard (now almost universal) is  which is known as the French "diapason normal." Between 1699 and 1859 the standard rose from 404 to 455.

Pitch Pipe. A wooden pipe used to give the keynote. A small tube containing a free reed is now generally used.

Piu (It.). More; as, **Piu forte,** louder.

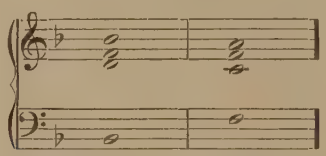
Piva (It.) (*pee-vah*). A bagpipe; also a piece of music in imitation of the bagpipe.

Pizzicato (It.) (*pits-e-cah'-to*), **Pincé** (Fr.), **Gekneipt** (Ger.). Lit., "pinched." A direction in music for bow instruments to pluck the strings with the finger, as in the guitar. (Abbr., **Pizz.**)

Placidamente (It.) (*plah-chee-dah-men'-teh*). Placidly; quietly.

Placido (It.) (*plah-chee'-do*). Placid; quiet.

Plagal Cadence. From subdominant to tonic:



Plagal Scales or **Modes.** In the ecclesiastical system, those scales beginning a fourth below the authentic scales, but ending on the keynotes of their related authentic scales. They are distinguished by the prefix *hypo* [Gr., ὑπο, below], as Dorian (authentic) D-D, ending on D; Hypodorian (plagal) A-A, ending on D.

Plain Chant. Plain song. **Cantus planus,** or **Cantus choralis** (Lat.), the early music of the church, written in the ecclesiastical modes (also called Ambrosian) and Gregorian scales. In the 12th century the unrhythmic melodies of the early forms of plain song were largely superseded by the rhythmic cantus mensurabilis, or measured song, which came into existence upon the invention of notes by Franco of Cologne. Before this invention the musical rhythm depended entirely on the rhythm of the words to which it was sung.

Plainté (Fr.). Elegy; lament.

Plaisanterié (Fr.) (*play-zong-te-ree*). A lively fantasia in which various dance-tunes are introduced.

Planxties. Laments; music of Irish harpers to celebrate the departed.

Plectrum [Gr., *plectron*]. A small rod of metal, bone, ivory, etc., or a flat strip of wood or tortoise shell, or a ring with a projecting piece, used to strike the strings of the lyre, Japanese guitar, mandolin, zither, etc.

Plein jeu (Fr.) (*plane zhoo*). Full power; full organ.

Pneuma (Gr.). Breath. See *Neumæ*.

Pneumatic Action. A contrivance in large pipe-organs by means of which a small bellows, called pneumatic bellows, is made to do the work of opening the palettes in place of the fingers.

Pochettino (It.) (*po-ket-tee-no*). Very little.

Pochetto (It.) (*po-ket'-to*). A little; (not so much as *Poco*).

Pochissimo (It.) (*po-kis-see-mo*). The "least little bit"; as **Cres. pochissimo,** the least degree louder.

Poco (It.). A little; rather; as, **Poco lento,** rather slow.

Poco a poco. By degrees; as, *Rall. poco a poco.*

Poggiato (It.) (*pod-je-ah'-to*). Dwelt upon; lit., leaned upon.

Poi (It.) (*po'ee*). Then; afterward. **P. poi f.,** soft, then loud.

Point (Fr.) (*po-ang*). A dot (Eng.). A phrase for imitation.

Point d'orgue (Fr.). Pedal point.

Pointé (Fr.) (*po-ang-teh*). Dotted.

Poitrine (Fr.) (*po-a-treen*). Chest. **Voix de poitrine,** chest voice.

Polacca. A Polish dance in $\frac{3}{4}$ time; polonaise.

Polka. A dance in time, originated among the peasants of Bohemia.

Polka Mazurka. A mazurka danced with the polka-step.

Polonaise. See *Polacca.*

Polska. Swedish dance in triple time.

Polyphonic [from Gr., *polus,* many; and *phone,* a voice]. Music written contrapuntally, as opposed to music written harmonically with a single melody.

Polyphony. "Many voices." Counterpoint in several parts.

Pommer. A large instrument of the hautboy family; bombard.

Pomposamente (It.) (*pom-po-sah-men'-teh*). Dignified; majestic.

Pomposo (It.). Pompous.

Ponderoso (It.). Ponderous; strongly marked.

Ponticello (It.) (*pon-tee-chel-lo*). The bridge of the violin, etc.

Portamento (It.) (*por'tah-men'-to*). Sliding or "carrying" the voice from one sound to another; also on bow instruments, sliding the finger along the string from one place to another.

Portando la voce. Same as *Portamento.*

Porte de voix (Fr.). (1) Portando la voce. (2) An obsolete grace in harpsichord music.

Portunal Flute. Organ-stop with wooden pipes which "flare," *i. e.,* get wider from the mouth to the top.

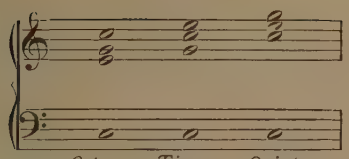
Portunen (Ger.) (*por-too'-nen*). The bourdon stop.

Posatif (Fr.) (*po-sa-teef*). The choir organ.

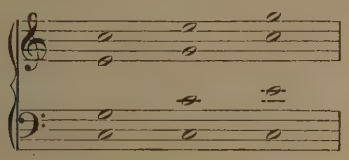
Posato (It.) (*po-sah'-to*), **Posément** (Fr.) (*po-seh-mong*). Quiet; sedate; grave.

Posaune (Ger.) (*po-zown-eh*). The trombone; a powerful reed-stop in the organ, of 8-, 16-, or 32-foot pitch.

Position. (1) Of chords. The common chord may be written in three positions, called the octave, tierce, and quint.



As given in this example it is called the close position of the chord; the following example is called the open position:



(2) On instruments of the violin and guitar family, "Position" refers to the part of the fingerboard on which the left hand is placed.

Possibile (It.) (*pos-see'-bee-leh*). Possible; as, **Il piu forte possibile,** as loud as possible.

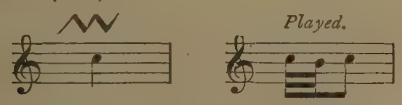
Postlude, Postludium (Lat.), **Nachspiel** (Ger.), **Clôture** (Fr.). The concluding voluntary on the organ; lit., afterplay.

Potpourri (Fr.) (*po-poor-ee*). A number of tunes strung together.

Poule, la. See *Quadrille.*

Poussé (Fr.) (*poos-seh*). "Push." Up bow.

Prächtig (Ger.) (*praych-tig*). Grand; majestic.

Pralltriller (Ger.).

now commonly called the Mordent. The sign for the mordent proper is . It always means that the auxiliary note is to be below the principal. When the line that crosses the sign was omitted it was called the Inverted Mordent or Pralltriller. The original form of the mordent is never used by modern writers.

Precentor. In the English Church, the clerical head of the choir; his side of the chancel is called the cantoris side. In the Scotch Presbyterian Church, the singer who stands in front of the pulpit and "gives out" the psalm tunes.

Precipitoso (It.), **Precipitato** (It.), **Precipitazione, con** (It.), **Precipitamente** (It.), **Precipité** (Fr.). A rapid, precipitate, hurried style of execution.

Prelude, Preludium (Lat.), **Vorspiel** (Ger.). An introduction; an opening voluntary; a composition which may or may not be in some regular form.

Premier (Fr.) (*preh-mee-eh*). First. **Première fois,** first time.

Preparation. The prolongation, in the same voice, of a sound from one chord in which it is a member into a chord in which it is not a member.

Prepared Trill. One preceded by a grace-note or turn.

Pressante (It.) (*pres-san'-teh*), **Pressieren** (Ger.) (*pres-see'-ren*), **Pressez** (Fr.) (*pres-seh*). Pressing on; hurrying.

Prestant (Ger. and Fr.). 4-foot metal open stop. Same as *Principal.*

Prestezza (It.) (*pres-tet'-za*), **con.** With rapidity.

Prestissimo (It.) (*pres-tis'-see-mo*), **Prestissimamente** (It.) (*pres-tis-se-ma-men'-teh*). As fast as possible.

Presto (It.). Fast.

Prick-song. Old name for written music. The first notes used were small, square marks without stems, called pricks, or points.

Primary Accent. The first member of the measure. When there are two or more accents in the measure, the first is the primary, the rest are called secondary.

Prima donna. First lady; the leading soprano.

Prima vista. At first sight.

Prima volta. First time; lit., first turn.

Prime. The first note of a scale; keynote; the generator of an overtone series; unison.

Primo (masc.), **Prima** (fem.) (It.) (*pree-mo, pree-ma*). First.

Primo tenore. First tenor.

Principal (Eng.). 4-foot open metal stop.

Principale (It.) (*prin-chee-pah-leh*), **Principal** (Fr.), **Prinzipal** (Ger.). The open diapason.

Probe (Ger.) (*pro-beh*). Rehearsal.

Program or **Programme.** A list of compositions to be performed at a musical entertainment.

Program-music. Music designed to "tell a story," or illustrate some action or event.

Progression. (1) Melodic—from note to note. (2) Harmonic—from chord to chord.

Progressive Stop. An organ-stop in which the number of pipes to each key increases as the pitch rises; a variety of mixture-stop.

Prontamente (It.) (*prom-tah-men'-teh*), **Promptement** (Fr.) (*prompt-mong*). Promptly; exactly; strictly.

Pronto (It.). Prompt; strict.

Pronunziato (It.) (*pro-nuntz-ee-ah'-to*), **Prononcé** (Fr.) (*pro-nong-seh*). Pronounced; emphatic. **Ben pronunziato** (It.), **Bien prononcé** (Fr.), well marked; strongly accented.

Prova (It.). Rehearsal.

Psaltery, Psalterium (Lat.), **Salterio** (It.), **Psalterion** (Fr.), **Psalter** (Ger.) [from Gr., *psaltein,* to harp]. Ancient instrument, consisting of a square, oblong, or triangular flat box, with wire strings stretched across it, played by the fingers, each of which is armed with a ring with a short projecting plectrum. The same instrument is called a dulcimer when played by two small hammers, held one in each hand.

Pulsatile. Instruments played by drumsticks or by clashing them together; as drums, cymbals, etc. [From Lat., *pulsare,* to beat.]

Pulse. A beat.

Punkt (Ger.) (*poonkt*). Dot; point.

Punta (It.) (*poon'-tah*). The point. **Colla punta d'arco,** with the point of the bow.

Puntato (It.) (*poon-tah'-to*). Pointed; staccato.

Purfling. The thin strips of wood (a white strip between two black) around the border of the back and belly of the violin, etc.

Pyramidon. An organ-stop with pipes shaped like an inverted pyramid, closed at top. From its peculiar shape a pipe not three feet long will produce 16-foot C.

Pyrophone [from Gr., *pur,* fire, *phone,* sound]. An instrument the sounds of which are produced by gas jets burning just inside of the lower end of glass tubes open at both ends. Invented by Kastner.

Q

Quadrate, B quadratum, *i. e.*, B squared. Old name for B♮—retained as the sign for a ♮.

Quadratum (Lat.). A breve 𝅜.

Quadrible or **Quatrible.** An ancient species of counterpoint, consisting of a succession of 4ths over a cantus.

Quadrille. A "square dance." See *Pantalon.*

Quadruple Counterpoint. A four-part counterpoint so constructed that the parts may change places without involving any false progressions.

Quadruple croche (Fr.) (*crosh*). A 64th-note.

Quadruplet. A group of four notes played in the same time of three or six of the same value.

Quality of Tone [Ger., *Klangfarbe* or *Tonfarbe;* Fr., *Timbre;* It., *Timbro*]. That which enables us to distinguish between different instruments. The character of a tone quality depends largely upon the presence or absence and relative intensity of its overtones; thus, the tone of a clarionet differs entirely from that of a violin, although all violins and all clarionets do not sound alike. The differences in tone quality that are found among violins, for example, depend on other factors, as the construction, material, weight of strings, individuality of the performer, and many more. The tone qualities of the voice are dependent largely on the accurate contact of the vocal cords, the size and shape of the cavity of the mouth and nostrils, and the management of the breath.

Quart. Interval of 4th. [It. and Lat., *Quarta.*]

Quart (Fr.) (*kart*). Quarter.

Quart de soupir (*soo-peer*). A 16th-rest.

Quart de mesure (Fr.) (*meh-zoor*). A 4th-rest.

Quartfagott (Ger.). A bassoon a 4th lower than the ordinary instrument.

Quartflöte (Ger.). A flute a 4th higher than the ordinary instrument.

Quarte du ton (Fr.) (*kart doo tong*). A 4th of the scale; subdominant.

Quarter Note ♩

Quartet. A composition for four solo performers. **String Quartet** is composed of first and second violins, viola, and violoncello. **Piano Quartet** is composed of violin, viola, violoncello, and piano. **Vocal Quartet** may be either for male or female or mixed voices.

Quartett (Ger.) (*kvar-tet'*), **Quatuor** (Fr.) (*qua-too-or*), **Quartetto** (It.) (*quar-tet'-to*). Quartet in English, sometimes spelled quartette.

Quartole (Ger.) (*kvar-to'-le*). Quadruplet.

Quasi (It.) (*quah'-see*). As if; in the manner of; like; as, *Quasi allegro,* like allegro; *Quasi sonata,* resembling a sonata.

Quatre mains (Fr.) (*katr mang*). For four hands.

Quatrible. See *Quadrible.*

Quattro mani (It.) (*quat-tro man-nee*). Four hands.

Quatuor. See *Quartet.*

Quaver. An eighth-note.

Querflöte, (Ger.) (*kvehr-fla'-teh*), **Flauto traverso** (It.). "Cross-flute." The flute played by blowing across it, as distinguished from the old flute, blown at the end.

Queue (Fr.) (*koo*). Tail-piece of violin; stem of a note.

Quickstep. A rapid march, generally in $\frac{6}{8}$ time.

Quinable. An old species of counterpoint, consisting of a succession of fifths above the cantus.

Quint. (1) A 5th. (2) An organ-stop a 5th above the diapason.

Quint Viola. An organ-stop of the Gamba species a 5th or 12th above the diapason.

Quintaton. An organ-stop so voiced that it gives two sounds—the fundamental and the 12th. The pipes are of metal, slender and closed.

Quinte (Ger.) (*kvin-teh*). (1) The interval of a 5th. (2) The E-string of the violin.

Quintet. A composition for five solo performers. The string quintet generally consists of first and second violins, first and second violas, and violoncello; occasionally two violoncellos are used, in which case it is called a Violoncello Quintet to distinguish it from the former. The Piano Quintet consists of a string quartet and the piano.

Quintole (Ger.) (*kvin-to'-leh*). A group of five notes to be played in the time of four of the same value.

Quintuor (Fr.) (*kang-too-or*), **Quintetto** (It.), **Quintett** (Ger.) (*kvin-tet*). Quintet, or quintette.

Quintuplet. Quintole.

Quire and Quirester. Old English for choir and chorister.

Quodlibet (Lat.) (*quod-lee'-bet*). "What you will." A performance in which every participant sings or plays a different tune; an impromptu fantasia; a musical jest.

R

R. Abbreviation for Right. In French organ music, for Recit. (swell manual).

Rabbia (It.) (*rab'-be-a*), **con.** With fury.

Rackett or **Rankett.** An obsolete instrument resembling the double bassoon; a 16- or 18-foot stop in old organs.

Raddolcendo (It.) (*rad-dol-chen'-do*), **Raddolcente** (*rad-dol-chen'-teh*), **Raddolcito** (*rad-dol-chee'-to*). Growing gradually softer and sweeter.

Radiating Pedals. A fan-shaped arrangement of the pedal keys of the organ; the narrow end of the fan farthest from the organ. Radiating pedals are generally "concave" at the same time, that is, the pedals at the sides are higher than those in the middle.

Radical Bass. The root of a chord.

Rallentamento (It.) (*ral-len-ta-men'-to*). Slower. Same as *Piu lento,* or *Meno mosso.*

Rallentando (It.) (*ral-len-tan'-do*), **Rallentato** (*ral-len-tah'-to*), **Rallentare** (*ral-len-tah'-reh*). Gradually slower. Abbreviation for the above, **Rall.**

NOTE.—Rallentando and Ritenuto, although both mean to "get slower," differ somewhat in the manner of using them: Rallentando being used at the end of a piece (movement); Ritenuto in the course of a piece, followed by "A Tempo," when the original pace is to be resumed. Ritardando is used in the same way as Ritenuto. Abbreviation for both is *Rit.*

Rank. A row of organ-pipes belonging to one stop. Mixture-stops are of 2, 3, 4, 5, or 6 ranks, according to the number of pipes that "speak" for each key.

Rant. An old dance. In scotland many dance-tunes are called rants.

Ranz des vaches (Fr.) (*rongs deh vash*). Lit., "row of cows." Tunes played or sung by the Swiss as cattle calls. (In Ger., *Kuhreihen.*) As the Alpine horn is a simple tube, the melodies played on it are formed from the natural harmonic notes. When the *ranz des vaches* are sung, the melodies are varied by adding the characteristic Jodel. Many of these melodies are of great antiquity and exceeding beauty.

Rapidamente (It.) (*rah-pid-a-men'-teh*). Rapidly.

Rapidita (It.) (*rah-pid'-ee-tah*), **con.** With rapidity.

Rapido (It.) (*rah'-pee-do*). Rapid.

Rasgado (Sp.). In guitar-playing, a direction to sweep the strings with the thumb.

Rattenuto (It.) (*rat-teh-noo'-to*), **Rattenendo** (It.) (*rat-teh-nen-do*). Holding back the movement.

Rauschquinte (Ger.) (*rowsh'-kvin-teh*). A two-rank mixture-stop.

Rauscher (Ger.) (*row-sher*) [from *rauschen,* to rustle]. A repeated note on the piano.

Ravvivando il tempo (It.) (*rav-vee-van'-do*). Lit., "reviving the time." Resuming the original tempo after a rall. or rit.

Re. The second Aretinian syllable; the note D in French, Italian, and Spanish. In tonic sol-fa spelled **Ray.**

Real Fugue. One in which the subject and answer are identical, as opposed to *Tonal Fugue, q. v.*

Rebab, Rebec, Rebeck, Rebibe, Rebible. One of the precursors of the violin in the middle ages.

Recheat. A hunting signal sounded on the horn to recall the hounds.

Recht (Ger.). Right.

Recitando (It.) (*reh-chee-tan'-do*), **Recitante** (*reh-chee-tan'-teh*). In the style of a recitative.

Recitative (*res-i-ta-teev'*), **Recitatif** (Fr.) (*reh-see-ta-teef'*), **Recitativo** (It.) (*reh-chee-ta-tee'-vo*), **Recitativ** (Ger.) (*reh-see-ta-tiv'*). Declamatory singing, resembling chanting somewhat, and supposed, when invented in 1600, to be a revival of Greek art. Abbreviation **Recit.**

Recitative Accompaniment. The string band is generally used to accompany Recitative. If the accompaniment is at all elaborate the freedom of the singer is greatly curtailed. Modern writers frequently use the whole resources of the orchestra to accompany Recitative.

Recitativo secco. Dry Recitative was accompanied very sparingly with chords. It was customary at one time, during the pauses of the voice, for the violoncello to execute impromptu flourishes.

Reciting Note. In Gregorian chant, the dominant, being the note on which the greater part of the reciting is done.

Recorder. An obsolete instrument of the flageolet family; also an old name for the flute.

Redita (It.) (*reh-dee'-ta*). A repeat.

Redowa, Redowak, Redowazka. A Bohemian dance in $\frac{3}{4}$ time.

Redundant. Same as *Augmented.*

Reed, Zunge (Ger.) (*tsoon'-geh*), **Anche** (Fr.) (*onsh*), **Ancia** (It.) (*an'-che-a*). The technical name for the small thin strip of metal, cane, or wood, the vibration of which causes the sound of a variety of instruments. There are three kinds of reeds: (1) The single beating reed of instruments of the clarionet family; also of the reed-stops of the organ. (2) The double reed of the hautboy and bassoon family, also of the bagpipe; these two varieties are never used except in conjunction with a tube or pipe. (3) The free reed of the cabinet-organ, vocalion, etc. This reed may be used with or without a tube. The effect of the tube when combined with the free reed is analogous to that of a resonator, *i. e.,* the vibration of the contained air is sympathetic, whereas in the other cases the vibration of the reed is controlled by the column of air.

Reed Instruments. Those in which the sound is produced by the vibration of a reed in the mouthpiece.

Reel. A lively dance, nationalized in Ireland and Scotland; supposed to be of Danish origin, as the same kind of dance is found under the Danish name of Hreol.

Refrain. Burthen. (1) The chorus at the end of every stanza of some ballads. (2) The drone of a bagpipe. (3) The tune sung as an accompaniment to dancing.

Régales de bois (Fr.) (*reh-gal de bo-a*). See *Xylophone.*

Regals, Rigals, Rigoles. Small, portable organs with one or two sets of pipes, carried by a strap round the neck of the player, who worked the bellows with his left hand and manipulated the keyboard with the right.

Register. (1) Same as stop, or rank of pipes. (2) The projecting knobs on which the names of the stops are marked. (3) The compass of a voice. (4) One of the divisions of the voice; as, chest register, head register.

Registration. The combinations and successions of stops used by an organist in the performance of a piece.

Règle de l'octave (Fr.) (*regl de loc-tav*). See *Rule of the Octave.*

Relative Chord. A chord whose members are found in the scale.

Relative Key. One whose tonic chord is one of the common chords found in the scale.

Religioso (It.) (*reh-lee-jo'-so*), **Religiosamente** (*reh-lee-jo-sa-men'-teh*). In a devotional manner.

Relish. An obsolete harpsichord grace.

Remote Key. A non-related key.

Remplissage (Fr.) (*rom-plis-sazh*). Filling up. (1) The inner parts. (2) Sometimes used in the same sense as "development" (*durchführung*) in the sonata or rondo. (3) Non-essential (ripieno) parts. (4) Used in a contemptuous sense of a clumsy, overloaded composition.

Rendering. A modern term which is supposed to mean more than saying one "played" or "sang."

Repeat. A double bar with dots, thus signifies that the part before the double bar is to be repeated. If the dots are on both sides it signifies that the parts before and after the double bar are to be repeated.

Repercussion. The re-entry of subject and answer in a fugue, after an episode.

Repetition. (1) The reiteration of a note or chord. (2) A pianoforte action invented by Erard, which admits of the re-striking of a note before the key has risen to its normal position. (3) The re-entry of one of the principal themes of a sonata or rondo.

Répétition (Fr.) (*reh-peh-tis-yong*). A rehearsal.

Repetizione (It.) (*reh-peh-titz-e-oh'-neh*). Repetition.

Replicate. The recurrence of the same letter in an ascending or descending series; the octave repetitions of a given letter.

Reply, Répons (Fr.) (*reh-pong*), **Réponse** (Fr.) (*reh-pongs*), **Report.** The "answer" to a fugue subject or theme for imitation.

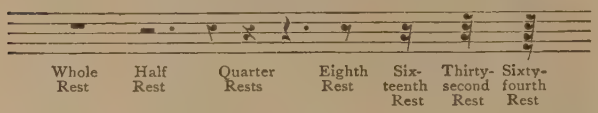
Reprise (Fr.) (*reh-prees*). (1) A repeat. (2) The re-entry of the principal theme in the second part of a sonata; also called **Rentrée** (*rong-treh*).

Requiem (Lat.). "Rest." The first word in the mass for the dead, hence called requiem mass.

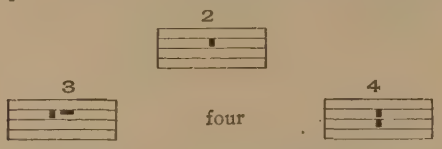
Resin or **Rosin.** The clarified gum of the pitch pine.

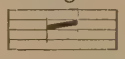
Resolution. The movement of a dissonant to a consonant sound.

Rests. Signs indicating silence of the same duration as the notes for which they stand. In all varieties of time the whole rest is used to indicate a silence of one measure.



Three forms of quarter-rest are found. No. 1 is generally found in music printed from type, Nos. 2 and 3 in engraved music. No. 2 is the most convenient form in MS. In orchestral parts a rest of two measures is indicated thus:



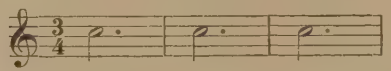
Any number of measure rests may be expressed by combining these three signs, but when the number exceeds six it is generally expressed thus:  a heavy diagonal line with numeral above it.

Retardation. The prolonging of a sound which is a member of one chord into a chord in which it is not a member, thus producing a dissonance. See *Resolution.*

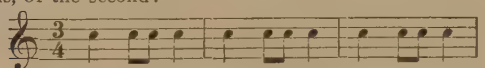
Reverie. A sentimental name used by some modern writers for composition of like character, generally in lyric form.

Rhapsodie or **Rhapsody** [from Gr., *rhabdos,* a staff]. The Rhapsodists were wandering reciters who carried a long staff. The term is now applied to an irregular, formless composition which "wanders" from one theme, or key, or tempo to another at the will of the composer.

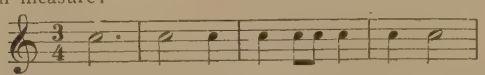
Rhythm. (1) The recurrence of accents at equal intervals of time. (2) The repetition of a group of sounds (not necessarily melodic) at equal intervals of time. This is an illustration of the first meaning:



This, of the second:



The first may be called the essential rhythm; it is never destroyed, no matter how much it may be divided by the second or ideal rhythm, thus the essential rhythm of the following passage is 1′ 2 3; the ideal rhythm varies with each measure:



Rhythm is the first essential of melody; without it we have only an aimless rising and falling of sounds. The essential rhythm is a fixed quantity which will bear very little tampering with. Witness the generally unsatisfactory effect of those compositions in which alternate measures of two and three units are used. Its pace may be changed by acceleration or retardation provided the rhythmical unit is maintained. The ideal rhythm, or rhythm of the melody, is, on the other hand, completely under the composer's control, provided that its melodic motives, phrases, etc., may be "measured" by the rhythmical units adopted as the "time signature."

Ricercata (It.) (*ree-cher-cah′-ta*). A species of fugue very highly elaborated.

Rigadoon. A rapid dance of French origin, generally in $\frac{4}{4}$ time.

Rigore (It.) (*ree-go′-reh*), **con, Rigoroso** (*ree-go-ro′-so*). With rigor; exactly; in strict time.

Rilasciando (It.) (*ree-lah-she-an′-do*), **Rilasciante** (*ree-lah-she-an′-te*). Relaxing the time; retarding.

Rimettendo (It.) (*ree-met-ten′-do*). Holding back; retarding.

Rinforzando (It.) (*rin-for-tzan′-do*), **Rinforzare** (*rin-for-tzah′-reh*), **Rinforzato** (*rin-for-tzah′-to*). Lit., re-enforcing. Placing a strong accent on a note or passage.

Ripieno (It.) (*ree-pee-eh′-no*). "Filling up." A part that is not essential to the score, added to increase the volume of a tutti.

Ripigliare (It.) (*ree-peel-yah′-reh*), **Riprendere** (*ree-pren′-deh-reh*). To resume.

Ripresa (It.) (*ree-preh′-sah*), **Riprese** (It.). A repeat; the sign 𝄋

Risentito (It.) (*ree-sen-tee′-to*). With energetic expression.

Risolutamente (It.) (*ree-so-lu-ta-men′-te*). Resolutely.

Risoluto (It.) (*ree-so-lu′-to*). Resolute.

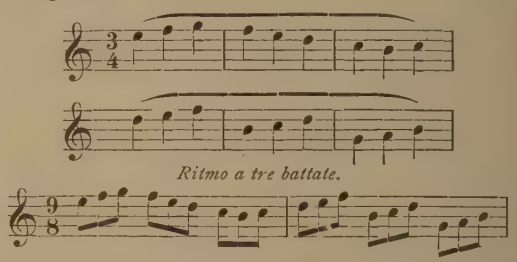
Risoluzione (It.) (*ree-so-loot-ze-o-neh*), **con.** With resolution.

Risvegliato (It.) (*ris-vehl-ya-to*). Animated; lively.

Ritardando (It.) (*ree-tar-dan′-do*), **Ritardato** (*ree-tar-dah′-to*), **Ritenuto** (*ree-ten-oo′-to*), **Ritenente** (*ree-ten-en′-teh*). Holding back; retarding. Abbreviation **Rit.**

Ritmo (It.). See *Rhythm.*

Ritmo a due battate. Of two measures.

Ritmo a tre battate. Of three measures. The following passage, which, being written in $\frac{3}{4}$ (scherzo) time, looks like a six-bar phrase, is in reality a two-bar phrase, founded on the triple unit:

Ritmo a tre battate.

written in $\frac{9}{8}$ time; or it may be written in $\frac{3}{4}$ time with triplets.

This example is analogous to the oft-quoted one in the scherzo of Beethoven's ninth symphony.

Ritornella (It.) (*ree-tor-nel′-la*). Interlude; chorus; burden; tutti in the old concertos.

Robusto (It.) (*ro-bus′-to*). Robust; bold.

Roger de Coverley. Old English country dance in $\frac{2}{4}$ time.

Röhrflöte (Ger.) (*rare′-fla-teh*). Reed-flute; a flute-stop in the organ.

Rôle (Fr.) (*roll*). The part in an opera or play assigned to any performer.

Roll, Wirbel (Ger), **Rollo** (It.), **Roulement** (Fr.). The tremolo produced on the drum by the rapid alternation of blows with the drumsticks. On the kettle-drum the roll is produced by single alternating blows; on the side drum, by double alternating blows.

Romance. (1) A ballad. (2) An instrumental piece in lyric form, of romantic character; often used as the slow movement of a sonata, etc.

Romanesca (It.) (*ro-ma-nes′-ca*), **Romanesque** (Fr.) (*ro-man-esk*). Same as *Galliard.*

Romantic. A vague term for that form of art in which the emotional content is considered as of more importance than the form. The term "romantic" is often used as opposed to classic; but the application of "classic" is as vague as is that of "romantic." The element of time seems to be an essential of classicism, the work of a living author never being considered classic. The term romantic may be defined as roughly dividing the music written on harmonic principles from that written before the principles of harmonic combination and succession were discovered; but already the romantic school has been sub-divided into what may be called the classic-romantic and the new-romantic; but since every "new" thing must in time become "old," this last school must, when its day is past, give place to a newer romanticism.

Rondo, Rondeau (Fr.). One of the forms of composition characterized by the return of the first theme after the presentation of each new theme. The modern rondo partakes of the character of the sonata form, in that its second theme is repeated in the tonic key, having been first given in the dominant key. The following schemes exhibit at a glance the usual forms of the rondo:

MAJOR KEY.—I Th. II Th. I Th. || III Th. I Th. II Th. I Th.
Tonic. Dom. Tonic Subdom. Rel. min. Par. min. Tonic. Tonic. Tonic

MINOR KEY.—I Th. II Th. I Th. || III Th. I Th. II Th. I Th.
Tonic. Rel. major. Tonic Subdom. of rel. major. Tonic. Tonic major. Tonic

Example of Rondo in Major Key—last movement of Op. 2, No. 2 (Beethoven).

Example of Rondo in Minor Key—last movement of Sonata Pathétique.

Root. The fundamental or generating note of a chord.

Rosalia (It.) (*ros-al-ya*). The repetition of a melodic phrase several times, each time one degree higher or lower than the last. It gets its name from an Italian folk-song, "Rosalia Mia Cara," the melody of which is constructed in this way. Although not considered good writing, many examples may be found in the works of the greatest composers. Three such repetitions are generally considered allowable. In Germany the Rosalia has the ludicrous name of *Schusterfleck* (cobbler's patch), also *Vetter Michel* (Cousin Michel), from its occurrence in a well-known Volkslied, "Gestern Abend war Vetter Michel da."

Rose. The sound-hole in the belly of the guitar, mandolin, etc.

Rosin. See *Resin.*

Rota (Lat.). A round.

Rote. Hurdy-gurdy; vielle.

Roulade (Fr.) (*roo-lad*). A brilliant run; an ornamental flourish.

Round. A variety of canon, the imitation being always at the 8*va* or unison.

Roundel, Round, Roundelay. A dance in which a ring with joined hands was formed. Roundelay also means a poem with a constantly reiterated refrain or burden.

Rubato (It.) (*roo-bah'-to*). Robbed; stolen. The direction Rubato, or Tempo Rubato, indicates a style of performance in which the rhythmic flow is interrupted by dwelling slightly on certain melodic notes and slightly hurrying others. This style of performance is used with great effect in the modern intensely emotional school of music.

Ruhig (Ger.) (*roo'-ig*). Calm; quiet; tranquilly.

Rule of the Octave. An old formula for putting chords to the diatonic scale, major or minor.

Run. A passage founded on the scale, generally used in vocal music. The run is generally sung to one syllable.

Rusticano (It.) (*rus-tee-cah'-no*). Rustically.

Rustico (It.) (*rus'-tee-co*). Rustic; pastoral.

Rutscher (Ger.) (*root'-sher*). "Slider." Old name for the galopade.

Ruvido (It.) (*roo'-vee-do*). Rough; harsh.

Rythme (Fr.) (*reethm*), **Bien rythmé** (Fr.), **Ben ritmato** (It.). Well marked; exact.

S. Abbreviation of **Segno** (sign); **Senza** (without); **Sinistra** (left); **Solo**; **Subito** (quickly).

𝄋 A sign used to point out the place from which a repeat is to be made. **Al** 𝄋, to the sign; **Dal** 𝄋, from the sign.

Sabot (Fr.). A "shoe." Part of the mechanism of the double-action harp, consisting of a revolving disk of brass with two projecting studs; when the pedal is depressed the string is caught between the studs and drawn tighter, thus raising its pitch.

Saccade (Fr.) (*sac-cad*). A strong pressure of the violin bow on the strings, causing two or three to sound together.

Sackbut. An old name for a species of the trombone. Sometimes written Sagbut.

Sackpfeife (Ger.). Bagpipe.

Saite (Ger.) (*sy-teh*). A string.

Salicional, Salicet, Salcional [from Lat., *salix,* willow]. A soft, open metal organ-stop.

Salonflügel (Ger.). Parlor grand pianoforte.

Salonstück (Ger.). Parlor piece; salon music.

Saltarello (It.) (*sal-tah-rel'-lo*) [from *saltare,* to leap]. An Italian dance in triple time.

Saltato (It.). "Springing bow" in violin playing.

Salto (It.). A skip. A counterpoint that moved by skips was called C. P. di salto; in Lat., *C. P. per saltem.*

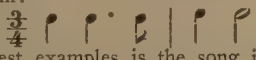
Sambuca. Generally supposed to be an ancient variety of the harp. The Sabeca, mentioned in the Bible (Daniel iii: 5, 7, 10, 15), translated "sackbut" in the English version, is supposed to be the same instrument. The derivation of the word is not known.

Sampogna or **Zampogna** (It.) (*sam-pone'-ya*). Bagpipe.

Sanft (Ger.). Soft.

Sans (Fr.). Without.

Saraband, Sarabanda (It.), **Zarabanda** (Sp.), **Sarabande** (Fr.). A slow, stately dance in $\frac{3}{4}$ time, used as the "slow movement" in the suite. The Saraband is founded on the following rhythm:



One of the finest examples is the song in "Rinaldo," by Handel, *"Lascia ch'io pianga,"* which is said to have been written first as a Saraband, and afterward adapted to the words.

Sarrusophone. A brass wind instrument with a double reed like hautboy.

Satz (Ger.). (1) A theme. **Hauptsatz,** principal theme; **Seitensatz,** secondary theme; **Nebensatz,** auxiliary theme; **Schluss-Satz,** closing theme, or coda. (2) A piece; composition.

Saxhorn. A brass instrument with from three to five cylinders or pistons; invented by A. Sax. Saxhorns are made in seven different keys. A saxhorn band consists of "high horn" (or cornet), soprano, alto, tenor, baritone, bass (or tuba), double bass (or bombardon). The "high horn," alto, and bass are in E♭, the others in B♭.

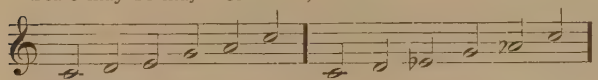
Saxophone. Brass instrument with clarionet mouthpiece, invented by A. Sax. Made in seven sizes, corresponding to the saxhorns, except that there are two of each kind, differing by a whole tone in pitch; thus: Sopranino (high saxophone) in F and E♭, soprano in C and B♭, alto in F and E♭, tenor in C and B♭, baritone in F and E♭, bass in C and B♭. The saxophone is extensively used in France in military bands, but has not as yet found its way into the orchestra, as its tone quality is not of a character to mix well with the rest of the orchestra.

Saxtromba. Brass instrument resembling the saxhorn, but differing in tone quality from having a narrower tube.

Saxtuba. The bass saxhorn.

Sbalzato (It.) (*sbalt-zah'-to*). Impetuously; dashing.

Scale. (1) A succession of ascending or descending sounds. **Major Scale,** a series of sounds with a half-tone between 3-4 and 7-8, reckoning upward. **Minor Scale,** a series of sounds with a half-tone between 2-3 and 5-6 in the natural minor, in the Melodic Minor, 7-8, ascending. The Melodic Minor descends, like the Natural Minor; in the Harmonic Minor there are half-tones between 2-3, 5-6, and 7-8, and a tone and a half between 6 and 7. The Minor Scale sometimes descends with raised 6 and 7. Many examples may be found in Bach's music. **Chromatic Scale,** one formed wholly of half-tones. **Pentatonic Scale** [Gr., *penta,* five, *tonos,* sound], one that omits the 4 and 7. The Pentatonic Scale may be major or minor, thus:



Hungarian Gypsy Scale consists of the following curious succession:

(2) The series of overtones of a simple tube, such as the horn without valves. (3) In organ-pipes, the proportion between the length and the diameter. (4) In the piano, the proportion between the length, weight, and tension of the string and the pitch of the sound it is meant to give. Piano builders include many other points in the term "scale;" those given are the most important.

Scemando (It.) (*shay-man'-do*). See *Diminuendo.*

Scena (It.) (*shay-nah*). (1) A scene. (2) A solo for voice in which various dramatic emotions are expressed.

Scenario (It.) (*shay-nahr'-yo*). (1) The plot of a drama. (2) The book of stage directions.

Scene. (1) See *Scena.* (2) A division of a dramatic performance. (3) A stage-setting.

Schablonenmusik (Ger.). "Pattern" or "stencil" music, *i. e.,* correct, but uninspired.

Schäferlied (Ger.) (*shay'-fer-leet*). Shepherd song; pastoral.

Schäferspiel (Ger.) (*shay'-fer-speel*). Pastoral play.

Schallbecken (Ger.). "Sound bowls"; cymbals. Frequently called **Becken.**

Schalmay, Schalmei (Ger.). A shawm.

Scharf (Ger.). Sharp. A mixture-stop.

Schaurig (Ger.). Weird; dread-inspiring.

Scherz (Ger.) (*sherts*). Droll; playful.

Scherzando (It.) (*sker-tzan'-do*), **Scherzante** (*sker-tzan'-teh*), **Scherzevole** (*sker-tzeh'-vo-leh*), **Scherzoso** (*sker-tzo'-so*). All derived from *scherzo,* and signifying a light, playful style of performance or composition.

Scherzhaft (Ger.). Funny; amusing.

Scherzo (It.) (*skert'-zo*). A "jest." (1) A piece of music of a sportive, playful character. (2) A symphony or sonata movement of this character, taking the place of the minuet. Haydn first changed the character of the minuet, while still retaining its name, by giving it a light, playful character and more rapid tempo. Beethoven discarded the name and adopted that of *Scherzo,* and still further increased the rapidity of the movement; all that he retained of the minuet was the $\frac{3}{4}$ time. Many composers since Beethoven have made still further departure, Scherzi being now written in $\frac{6}{8}$ and $\frac{2}{4}$ time.

Schiettamente (It.) (*ske-et-ta-men'-teh*). Without ornament.

Schietto (It.) (*ske-et'-to*). Simple; neat.

Schleppend (Ger.). Dragging; retarding.

Schluss (Ger.). End; close.

Schlüssel (Ger.). Key; clef.

Schlussfall (Ger.). Cadence.

Schlussnote (Ger.). Last note.

Schluss-Satz (Ger.). Last movement; last theme; coda.

Schmeichelnd (Ger.). Coaxing; *lusingando.*

Schmelzend (Ger.) (*schmel'-tzend*). Lit., melting; *morendo.*

Schmerz (Ger.) (*schmerts*). Pain; sorrow.

Schmerzlich (Ger.). Painful; sorrowful.

Schnell (Ger.). Quick.

Schneller (Ger.). An inverted mordent (called mordent in modern usage):

with accent on the first note.

Schottische. A dance in $\frac{2}{4}$ time resembling the polka.

Schusterfleck (Ger.). See *Rosalia.*

Schwach (Ger.). Weak; soft.

Schwärmer (Ger.). See *Rauscher.*

Schwebung (Ger.) (*shveh'-boonk*). A beat. (Acoustic,) *i. e.,* produced by the simultaneous vibration of two sounds, especially prominent in unisons and octaves when not in tune.

Schweigezeichen (Ger.) (*schvei-geh-tseich-en*). Lit., "silence sign." A rest.

Schwellen or **Anschwellen** (Ger.). To swell the tone.

Schweller (Ger.). The swell organ.

Schwellton (Ger.). See *Messa di voce.*

Schwellwerk (Ger.). See *Schweller.*

Schwer (Ger.). Heavy; difficult.

Schwermütig (Ger.) (*schvehr'-mee-tig*). Sad; pensive.

Schwindend (Ger.). See *Morendo.*

Schwungvoll (Ger.) (*schvoong'-foll*). With elevated passion.

Scintillante (It.) (*shin-til-lan'-teh*), **Scintillante** (Fr.) (*sin-tee-yong*). Scintillating; brilliant; sparkling.

Sciolto (It.) (*shol'-to*), **Scioltezza** (*shol-tet'-za*), **con, Scioltamente** (*shol-tah-men'-teh*). Freedom; fluency; with freedom; freely.

Score. See *Partition.*

Scoring. See *Instrumentation.*

Scorrendo (It.) (*skor-ren'-do*), **Scorrevole** (*skor-reh'-vo-leh*). Gliding; glissando.

Scotch Snap. A short note followed by a longer one; thus borrowed from Hungarian gypsy music.

Scozzese (It.) (*skotz-zeh'-seh*), **alla.** In Scotch style.

Scroll. The head of the violin, etc.

Sdegno (It.) (*sdehn'-yo*). Scorn; disdain.

Sdegnosamente (It.) (*sdehn'-yo-sa-men'-teh*). Scornfully.

Sdegnoso (It.) (*sdehn-yo'-so*). Scornful.

Sdrucciolando (It.) (*sdroot-sho-lan'-do*). See *Glissando.*

Se (It.) (*seh*). As if.

Sec (Fr.), **Secco** (It.). Dry. See *Recitativo secco.*

Second. (1) An interval embracing adjacent letters. (2) The lower of two equal voices or instruments. (3) The alto in a vocal quartet or chorus.

Seconda Donna. Second lady; the next in rank after the prima donna.

Secondo (It.) (*seh-con'-do*). Second; the lower part in a duet for two voices or instruments; the lower part in a four-hand pianoforte composition.

Seele (Ger.) (*seh'-leh*), **Âme** (Fr.). Soul. The sound-post of the violin.

Seg (It.). Abbreviation of **Segue,** *q. v.,* and of **Segno.**

Segno (It.). See *Signs.*

Segue (It.) (*sehg'-weh*). Follows. **Segue il coro,** the chorus follows.

Seguendo (It.) (*sehg-wen'-do*), **Seguente** (*sehg-wen'-teh*). Following. **Attacca il seguente,** attack what follows.

Seguidilla (Sp.) (*seh-gwee-deel'-ya*). A dance in $\frac{3}{4}$ time.

Sehnsucht (Ger.). Longing.

Sehnsüchtig (Ger.). Longingly.

Sehr (Ger.). Very.

Semi-breve. A whole note.

Semi-chorus. Half the chorus; a small chorus.

Semi-grand. A small (half) grand pianoforte.

Semi-quaver. A sixteenth note.

Semi-tone. A half tone. A chromatic semi-tone changes the pitch without changing the letter; as, C—C♯; a diatonic semi-tone changes both, as, C—D♭.

Semplice (It.) (*sem-plee'-cheh*). Simple.

Semplicimente (It.) (*sem-plee-chee-men'-teh*). Simply; unaffectedly.

Semplicita (It.) (*sem-plee'-chee-tah*), **con.** With simplicity.

Sempre (It.) (*sem'-preh*). Always.

Sensibile (It.) (*sen-see'-bee-leh*), **Sensible** (Fr.) (*song-seebl*). **Nota sensibile,** the leading note. **Note sensible,** "sensitive" note.

Sensibilita (It.) (*sen-see-bee'-lee-tah*), **con.** With feeling.

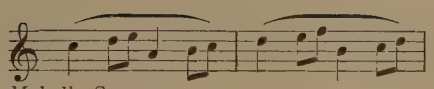
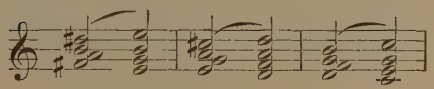
Sentito (It.) (*sen-tee'-to*), **Sentimento** (*sen-tee-men'-to*), **con.** With feeling; with sentiment.

Senza (It.) (*sen-tza*). Without.

Septet, Septuor. A composition for seven solo voices or instruments.

Septole (Ger.). Septuplet; a group of seven.

Se piace (It.) (*seh pe-ah'-cheh*). "Please yourself." *Ad libitum.*

Sequence, Melodic. The repetition of a melodic phrase at regular intervals. **Harmonic Sequence,** the repetition of a harmonic progression at regular intervals. **Contrapuntal Sequence,** a succession of common chords with roots moving in a regular "pattern."

Melodic Sequence.

Harmonic Sequence.

Contrapuntal Sequence.

Seraphine. A free-reed instrument that preceded the harmonium.

Serenade, Sérénade (Fr.), **Serenata** (It.), **Ständchen** (Ger.). Lit., an evening song. The Italian form, Serenata, is also applied to an instrumental symphonic composition, and by Handel to his cantata "Acis and Galatea."

Sereno (It.) (*seh-reh'-no*). Serene; tranquil.

Serio (It.) (*seh-re-o*). Serious.

Serioso (It.). Gravely; seriously.

Serpent. A nearly obsolete instrument made of wood covered with leather, cup-shaped mouthpiece, finger-holes, and keys.

Service. A musical setting of the canticles, etc., of the Episcopal Church.

Sesqui-altera. A mixture-stop in the organ. In ancient musical nomenclature the following compounds with Sesqui were used:
Sesqui-nona, *i. e.,* the ratio of 9 to 10; minor whole tone.
Sesqui-octava, 8 to 9; major whole tone.
Sesqui-quinta, 5 to 6; minor third.
Sesqui-quarta, 4 to 5; major third.
Sesqui-tertia, 3 to 4; perfect fourth.
Sesqui-tone, a minor third.

Sestet. See *Sextet.*

Sestetto (It.). See *Sextet.*

Sestole. See *Sextuplet.*

Seule (Fr.) (*sool*). Alone.

Seventeenth. An organ-stop sounding the octave of the major 3d above the diapason; called also the tierce.

Seventh. An interval including seven letters. **Seventh Major,** seven letters and eleven half-tones, as C—B. **Seventh Minor,** seven letters and ten half-tones, as C—B♭. **Diminished Seventh,** seven letters and nine half-tones, as C♯—B♭.

Severamente (It.) (*seh-veh-rah-men'-teh*). Severely; strictly.

Severita (It.) (*seh-ver'-ee-ta*), **con.** With severity; exactness.

Sextet, Sestet, Sestetto (It.), **Sextuor** (Fr.). A composition for six solo voices or instruments.

Sextuplet. A group of six notes occupying the time of four.

Sfogato (It.) (*sfo-gah'-to*) [from *sfogare,* to evaporate]. A soprano voice of thin, light quality and unusually high range is called a soprano sfogato.

Sforzando (It.) (*sfortz-an'-do*) or **Sforzato,** abbreviated **Sf.** or **Sfz.** "Forced." A strong accent immediately followed by piano.

Shake. See *Trill.*

Sharp. The sign, ♯, which raises the pitch of a letter a half tone. Sharp is sometimes used in the sense of augmented, as sharp 6th for augmented 6th; popular name for the black keys of pianoforte and organ.

Sharp Mixture. A mixture with shrill-voiced pipes.

Shawm. See *Calamus.*

Shift. A change in the position of the left hand on the fingerboard of the violin; each shift is a fourth higher than the preceding one.

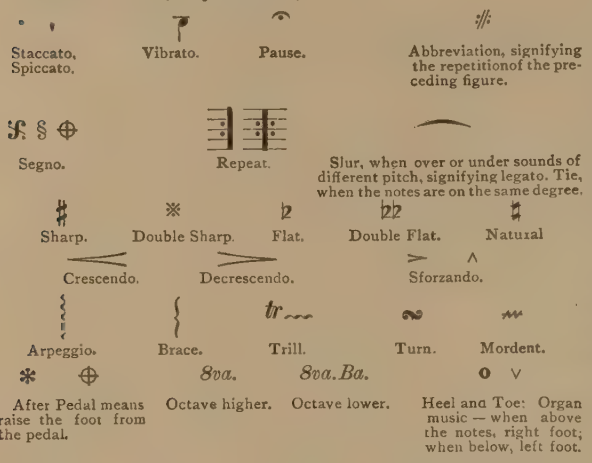
Si. (1) The note B in French, Italian, and Spanish. (2) The Italian impersonal pronoun, "one," or "they," as, *si piace,* "one" pleases, *i. e.,* as you please.

Siciliana (It.) (*see-cheel-ya'-nah*), **Sicilienne** (Fr.) (*see-see-lee-en*). A pastoral dance in slow $\frac{6}{8}$ time; slow movements, vocal or instrumental, are frequently called Sicilianas.

Side Drum. See *Drum.*

Siegeslied (Ger.) (*see'-ges-leed*). Song of victory.

Signs. (Only the most important are here given. Complete information may be obtained by consulting the "Embellishments of Music," by Russell.)



Signature, Signatur (Ger.), **Time.** The signs $\mathbb{C}$ $\mathbb{C}$ etc. **Key Signature,** the sharps or flats marked at the beginning of a part or piece.

Simile (It.) (*see-mee-leh*). The same; in the same way.

Sinfonia (It.), **Sinfonie** (Ger.), **Symphonie** (Fr.), **Symphony** [from Gr., *sumphonia,* a sounding together]. Originally had the same meaning that we attach to interval, *i. e.,* two simultaneous sounds. (1) By the early writers of Italian opera it was used in the modern sense of overture. (2) The introduction to a song is still called the symphony. (3) The adaptation of the large forms of composition (sonata and rondo) to the orchestra.

Singend or **Singbar** (Ger.). Singing; cantabile.

Singhiozzando (It.) (*sin-ghee-otz-an'-do*). Sobbingly.

Singspiel (Ger.) (*sing-speel*). "Sing-play." Operetta; an opera without recitatives, the dialogue being spoken. "Der Freischütz," when first produced, was of this character, which may be considered as one of Germany's contributions to the development of the opera, the Italian operas from the beginning being largely composed of recitative. The "Singspiel" form has found its most congenial home and its best exponents in France.

Sinistra (It.). Left.

Sino, Abbr., **Sin.** (It.) (*see'-no*). As far as; used after D. C., or al 𝄋; as **al 𝄋, Sin' al fine,** go to the sign, then as far as "fine." **D. C. sin' al 𝄋,** from the beginning as far as the sign.

Sixteenth Note. 𝅘𝅥𝅯

Sixth. An interval including six letters.

Sixth Major. Six letters, nine half-tones.

Sixth Minor. Six letters, eight half-tones. **Augmented Sixth,** six letters, ten half-tones. **Diminished Sixth,** six letters, seven half-tones.

Sixty-fourth Note. 𝅘𝅥𝅱

Slancio (It.) (*slan'-che-o*), **con.** With impetuosity.

Slargando (It.) (*slar-gan'-do*). Widening; growing slower.

Slargandosi (It.) (*slar-gan-do'-see*). Slower.

Slentando (It.) (*slen-tan'-do*). Gradually slower.

Slide. (1) The movable tube of the trombone. (2) See *Portamento.*

Slur. ⁀ Legato sign. In vocal music signifies that all the notes it includes are to be sung to one syllable.

Smanioso (It.) (*sma-ne-o'-so*). Frantic; raging.

Smaniante (It.) (*sma-ne-an'-teh*). Frantically.

Sminuendo (It.) (*smin-oo-en'-do*), **Sminuito** (*smin-oo-ee'-to*), **Smorendo** (*smo-ren'-do*). Same as *Diminuendo.*

Smorzando (It.) (*smor-tzan'-do*). Lit., "smothering"; morendo.

Snare Drum. See *Drum.*

Soave (It.) (*so-a'-veh*). Sweet.

Soavemente (It.) (*so-a-veh-men'-teh*). Sweetly.

Sogetto (It.). Subject; theme of a fugue.

Sognando (It.) (*sōne-yan'-do*). Dreaming; dreamily.

Sol. The note G in Italian, French, and Spanish; fifth Aretinian syllable.

Solenne (It.) (*so-len'-neh*). Solemn.

Solennemente (It.) (*so-len-neh-men'-teh*). Solemnly.

Solennita (It.) (*so-len'-nee-ta*), **con.** With solemnity.

Sol-fa (verb). To sing with the syllables.

Solfeggio (It.) (*solfed-jo*). (1) A vocal exercise. (2) Used by Bach as a name for certain short instrumental pieces.

Solmization. A method of learning to sing by the application of syllables to the scale. The earliest invention of this method of fixing the succession of sounds forming the scale in the memory is attributed to Guido of Arezzo (*ah-rets-o*), who used for this purpose the syllables ut, re, mi, fa, sol, la, having chanced to observe that these syllables—the first in the successive lines of a Latin hymn—were sung to six successive notes which formed a hexachord scale: C, D, E, F, G, A. There were seven hexachord scales, as follows: First began on G, 1st line bass staff; this was called the hexachordum durum (hard hexachord). Second began on C, a 4th higher. Third began on F, another 4th higher; in this scale B was flat; it was called the hexachordum molle (soft hexachord). Fourth, fifth, and sixth were respectively an octave higher than the first, second, and third, and the seventh was two octaves higher than the first. The first note of every scale was called *ut* (afterward changed to *do*), therefore from its inception "do" was "movable." Various modifications of these syllables have at different times been used for solmization. One extensively used at one time was the practice of using only four of them, viz., mi, fa, sol, la. These were so arranged that *mi* always fell upon the third note in the tetrachord, for example, the scale of C was sol-faed thus:

Tetrachord.				Tetrachord.			
C	D	E	F	G	A	B	C
sol	*la*	*mi*	*fa*	*sol*	*la*	*mi*	*fa*

It was owing to the difficulty and, to ancient ears, harshness of the skip from the *fa* of the lower tetrachord to the *mi* of the upper that the expression, "mi contra fa," came to have a proverbial meaning. This interval, called the tritone (three tones), was by the ancient theorists stigmatized as "tritonus diabolus est." New syllables have at different times been proposed; one scheme of which the syllables were bo, ce, di, ga, lo, ma, ni, was called bocedization; another with da, me, ni, po, hi, la, be, was called damenization. The only modifications and additions to the

syllables that have been permanently adopted are those used by the "Tonic Sol-faists." See *Tonic Sol-fa.*

Solo (It.) (plural, **Soli**). Alone; a composition in which the principal part is taken by one voice or instrument. **Solo Parts** are those sung or played by single performers as distinguished from chorus or tutti passages.

Somma (It.). Utmost; as **Con somma espressione,** with the utmost expression.

Sonabile (It.) (*so-nah'-bee-leh*), **Sonante** (*so-nan'-teh*). Resonant; sounding; sonorous.

Sonare (It.) (*so-nah'-reh*). To sound; to play upon.

Sonata (It.) (*so-nah'-tah*). "Sound piece." (1) The highest development of musical form. (2) In modern use, an extended composition with several movements for pianoforte, or pianoforte in conjunction with one other instrument. A composition of this class for more than two instruments is called trio, quartet, etc.; for full orchestra, a symphony. The "form" of the sonata (see *Form*) has undergone many modifications since it was first adopted, about the beginning of the 17th century. At first it was applied indifferently to any instrumental piece, such, for example, as were commonly called "airs." Those written for the harpsichord or for viols were called "sonata da camera." Those for the organ (or frequently those for harpsichord or viols, if written in grave style), "sonata da chiesa" (church sonata). The distinguishing characteristic of the modern sonata form is the possession of two themes in different keys (see Scheme in article *Form*). The gradual growth of this binary development may be traced in the works of Kuhnau, Scarlatti, Alberti, Durante, and others. The binary form was first definitely fixed by K. P. E. Bach. The only changes made since have been the immense development given to the form by Beethoven, and the adoption of other keys for the second theme.

Sonata di chiesa (It.) (*key-eh'-sa*). A church sonata; organ sonata.

Sonatilla (It.) (*so-na-til'-la*), **Sonatina** (It.) (*so-na-tee'-na*), **Sonatine** (Fr.) (*so-na-teen*). A short, easy, undeveloped sonata.

Song, Gesang, Lied (Ger.), **Chant** (Fr.), **Canto** (It.). (1) Originally a poem. (2) A musical setting of a poem, especially for one voice. (3) Folk-song (Ger., *Volkslied*). A simple air containing but one member, the words lyrical or narrative (if the poem is a lengthy narrative it is generally called a ballad). (4) Art songs contain several members, and in many cases, as in the songs of Schubert, Franz, Schumann, and others, rise to the highest plane of art expression. The Germans have a word, *durchkomponirt,* which is applied to songs every stanza of which has a separate musical setting, so designed as to exalt and emphasize the expression of the words.

Songs without words, Lieder ohne Worte (Ger.), **Chants sans paroles** (Fr.). A title invented by Mendelssohn and given by him to a set of pianoforte compositions. Songs for several voices are called part-songs. See *Part-Song.*

Sonoramente (It.). Sonorously.

Sonore (It.), **Sonoro** [from Lat., *sonus,* sound]. Sonorous; sounding.

Sonorita (It.) (*so-no'-ree-ta*), **con.** With resonance.

Sopra (It.). On; above; upon.

Soprano (It.), **Sopran** (Ger.), **Dessus** (Fr.) (*des-soo*). The female or boy's voice of the highest range.

Soprano Clef. C clef on the 1st line.

Soprano Sfogato (*sfo-gah'-to*). An unusually high light soprano.

Sordamente (It.). Veiled, dampened, muffled tone.

Sordino (It.) (*sor-dee'-no*). A mute; small instruments of metal, wood, etc., put on the bridge of the violin, etc., to deaden the tone. Pear- or cylinder-shaped mutes of wood, cardboard, or leather are put in the bell of the horn or trumpet with the same object. The use of sordino is indicated by **Con S.,** their removal by **Senza S.**

Sordo (It.). Mute; muffled. **Clarinetto sordo,** muted clarionet.

Sortita (It.) (*sor-tee'-ta*). "Going out." Concluding voluntary; first appearance of any character in an operatic performance.

Sospirando (It.) (*sos-pee-ran'-do*), **Sospiroso** (*sos-pee-ro'-so*), **Sospirante** (*sos-pee-ran'-teh*), **Sospirevole** (*sos-pee-reh'-vo-leh*) [from *sospiro,* a sigh]. Sighing; sobbing; mournful.

Sostenuto (It.) (*sos-teh-noo'-to*), **Sostenendo** (*sos-teh-nen'-do*). Sustained; without haste.

Sotto (It.). Below. **Sotto voce,** in an undertone.

Soubasse (Fr.) (*soo-bass*). A 32-foot organ pedal-stop.

Soubrette (Fr.) (*soo-bret*). A waiting maid; a minor female rôle in comic or comedy opera.

Sound-board. A thin sheet of spruce-pine, or fir, upon which the bridge that supports the strings of the pianoforte rests. The function of the sound-board is to increase the volume of the tone, which it does by taking up the vibration of the string. There are many unsolved problems in the relation which subsists between the string and the sound-board, as to the manner in which this amplification of the sound takes place. It is impossible to form a conception of the complications in the mode of vibration of the sound-board that must take place when, for example, a full chord is struck. Yet all these complications are not only simultaneous, but they obey the changing conditions of the most rapid execution with such swiftness and certainty that not a note is lost or a tone quality obscured.

Sound-box. The body of the violin, guitar, etc. The problems as to the function of the sound-box are even more complicated than those connected with the sound-board, as a sound-box is a combination of a sound-board and an enclosed mass of air, the vibrations of which have an important bearing on the quality and intensity of the tone.

Sound-hole. The orifice or orifices in the upper part, called technically the "belly," of the violin, guitar, etc. In the violin family they are called F-holes, from their resemblance to the letter *f*

Sound-post. A slender, cylindrical, wooden prop between the belly and the back in instruments of the violin family, placed under the foot of the bridge on the side of the highest string.

Sourdine (Fr.) (*soor-deen*). See *Sordino.*

Spaces. The intervals between the lines of the staff or between the leger lines.

Spalla (It.). The shoulder. Used in the sentence, **Viola da spalla,** one of the viols in a "chest."

Spanischer Reiter (Ger). See *Spanisches Kreuz.*

Spanisches Kreuz (Ger.) (*spah-nish-es kroits*). Spanish cross; German name for double sharp ※.

Sparta (It.) (*spar-ta*), **Spartita** (*spar'-ti-ta*). A score. See *Partition.*

Spasshaft (Ger.). Jocose; merry; scherzando.

Spezzato (It.) (*spets-sa'-to*) [from *spezzare,* to break in pieces]. Divided; broken.

Spianato (It.) (*spe-a-nah'-to*). Leveled; tranquillo.

Spianto (It.) (*spe-an-to*). Level; smooth.

Spiccato (It.) (*spik-kah'-to*). Detached; pointed.

Spiel (Ger.) (*speel*). Play.

Spielart. Style; touch.

Spielbar. Playable; well adapted to the instrument.

Spieloper. Operetta; comic opera.

Spieltenor. Light tenor; comic opera tenor.

Spinet. The predecessor of the harpsichord, called also couched harp.

Spirito (It.) (*spee-ree-to*), **con, Spiritoso** (*spee-ree-to'-so*), **Spiritosamente** (*spee-ree-to-sa-men'-teh*). With spirit; spirited; lively; animated.

Spitzflöte, Spindelflöte (Ger.). An organ-stop of reed-like quality, 8-, 4-, or 2-foot pitch.

Squilla (It.) (*squil'-la*). Little bell.

Squillante (It.) (*squil-lan'-teh*). Bell-like; ringing.

Stabile (It.) (*stah-bee'-leh*). Firm; steady.

Stac. Abbreviation of Staccato.

Staccatissimo (It.) (*stac-cah-tis'-see-mo*). As detached as possible. The sign for staccatissimo is a pointed dot over the note.

Staccato (It.) (*stac-cah'-to*). Detached; cut off; separated.

Staff or **Stave.** The five lines with their enclosed spaces. Gregorian music is written on a staff of four lines.

Standard Pitch. See *Pitch.*

Ständchen (Ger.). See *Serenade.*

Stark (Ger.). Loud; strong.

Stave. See *Staff.*

Stem, Hals (Ger.), **Queue** (Fr.), **Gambo** (It.). The part of a note consisting of a vertical line; also called tail.

Stentato (It.) (*sten-tah'-to*), **Stentando** (*sten-tan'-do*) [from *stentare,* to labor]. A heavy emphasis combined with a dragging of the time.

Step. From one letter to the next; a degree. **Whole Step,** a whole tone; **Half Step,** half tone; **Chromatic Step,** chromatic half tone.

Sterbend (Ger.) (*stair-bent*). Dying; morendo.

Steso (It.) (*stay-so*). Extended. **Steso moto,** slow movement.

Stesso (It.) (*stes-so*). The same.

Sticcado (It.). Xylophone.

Stil (Ger.) (*steel*), **Stilo** (It.). Style; manner.

Stillgedacht (Ger.). Soft organ-stop with closed pipes; stopped diapason.

Stimmbildung. Voice formation; voice training.

Stimme (Ger.) (*stim'-meh*). (1) Voice. (2) Part. (3) Sound-post. (4) Organ-stop.

Stimmen (verb). To tune.

Stimmung. Pitch, tuning.

Stimmungsbild. "Voicing picture," *i. e.,* a short composition designed to "voice" or express some given mood or emotion, *e. g.,* "Warum," by Schumann.

Stinguendo (It.) (*stin-gwen'-do*) [from *stinguere,* to extinguish]. Fading away; becoming extinguished.

Stirato (It.) (*stee-rah'-to*), **Stiracchiato** (*stee-rak-ke-ah'-to*) [from *stirare,* to stretch]. Retarding the time.

Stop. (1) To press the finger on the string of violin, guitar, etc. **Double Stop,** pressing two strings at once. (2) (noun) A rank or set of organ-pipes. **Draw Stop,** the arrangement of levers by means of which the "wind" is admitted to the various ranks of pipes at will, called also register. **Foundation Stop,** one of 8-foot pitch. **Mutation Stop,** one sounding the major third or perfect fifth, or both, over the fundamental. **Solo Stop,** one with a tone quality suited to the rendition of melody.

Stracino (It.) (*strah-chee'-no*), **Stracicato** (*strah-chee-cah'-to*), **Stracicando** (*strah-chee-can'-do*), **Stracinando** (*strah-chee-nan'-do*). A drag, or slur; sliding from one note to another and at the same time slightly slackening the time.

Strain. Song, air, tune, or a part of one.

Strathspey. A Scotch dance in $\frac{4}{4}$ time.

Stravagante (It.) (*strah-vah-gan'-te*). Extravagant; fantastic.

Stravaganza (It.) (*strah-vah-gant'-sah*). A fantastic composition.

Streng (Ger.). Rigid; severe.

Strepito (It.) (*streh'-pee-to*), **con.** With noise; fury.

Strepitosamente (It.) (*streh-pee-to-sah-men'-teh*). Furiously.

Strepitoso (It.) (*streh-pee-to'-so*). Furious.

Stretta, Stretto (It.). "A throng." (1) Hurrying the time at the close. (2) In fugue, causing the voices to follow one another at less distance, so that the subject and answer are brought closer together.

Stridente (It.) (*stree-den'-teh*). Strident; noisy; impetuous.

String. Abbreviation for Stringendo.

String. Cords made of wire, catgut, or silk, used for musical instruments.

String Band. The violins, violas, violoncellos, and double bass, also spoken of collectively as the "strings" or the string quartet.

String Instruments. Those in which the tone is reproduced by the vibration of strings. They are classified as follows: 1st, strings plucked by the fingers—harp, guitar, etc.; 2d, strings struck by plectra—mandolin, zither, etc.; 3d, strings vibrated by means of a bow—violin, etc.; 4th, strings struck with hammers—pianoforte, dulcimer, etc.

String Quartet. A composition for two violins, viola, and violoncello.

String Quintet, Sextet, Septet, Octet are formed by combining the string instruments in various proportions.

Stringendo (It.) (*strin-jen'-do*). Hurrying the time.

Strisciando (It.) (*strish-e-an'-do*). Creeping; gliding.

Stromentato (It.). Instrumented; scored; orchestrated.

Stromento (It.) (*stro-men'-to*). Instrument.

Stromento di corda. String instrument.

Stromento di fiato or **di vento.** Wind instrument.

Stück (Ger.) (*stick*). A piece. **Concertstück,** concert piece. **Salonstück,** parlor piece.

Study, Étude (Fr.), **Studio** (It.). (1) A composition designed to facilitate the mastering of some special difficulty. (2) A name often given by modern writers to pieces analogous to the old toccata, *q. v.*

Stufe (Ger.) (*stoo'-feh*). A step; degree of the scale.

Stürmisch (Ger.). Stormy; furioso.

Suave (It.) (*soo-a'-veh*). Sweet.

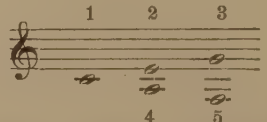
Suavemente (It.) (*soo-a-veh-men'-teh*). Sweetly.

Suavita (It.) (*soo-ah'-vee-ta*), **con.** With sweetness.

Sub-bass. An organ pedal-stop of 16- or 32-foot tone.

Sub-dominant. The 4th degree of the scale; not called subdominant because it is below the dominant, but because it is the same distance below the tonic that the dominant is above.

Sub-mediant. The 6th of the scale.



1. Tonic. 2. Mediant, *i. e.,* half-way to dominant. 3. Dominant. 4. Sub-mediant, *i. e.,* half-way to sub-dominant. 5. Sub-dominant.

Sub-octave. A coupler on the organ that pulls down the keys an octave below those struck.

Sub-principal. Open organ-stop, 32- and 16-foot pitch.

Sub-tonic. The leading note, 7th of the scale.

Subito (It.) (*soo-bee'-to*), **Subitamente.** Quickly. **Volti subito,** abbreviated **V. S.,** turn over quickly.

Subject. The theme of a fugue; any one of the themes of a sonata, rondo, etc.

Subordinate Chords. Those on the 2d, 3d, and 6th of the scale.

Suite (Fr.) (*sweet*). A set or series of movements. The suite originally consisted solely of dance tunes to which "airs" or movements, designated by the tempo terms, allegro, etc., were added. The classical suite contained: 1st, allemand; 2d, coranto; 3d, saraband; 4th, gigue, preceded by a prelude. Occasionally the gavotte, pavan, loure, minuet, etc., may be found with or in place of some of the above dances. According to the rule of the suite, all the movements had to be in the same key.

Suivez (Fr.) (*swee-vey*). Follow; a direction for the accompanist to follow the soloist.

Sujet (Fr.) (*soo-zhay*). Subject.

Sul, Sull, Sulla (It.). Upon; on; by; in violin music a passage to be played on a certain string is marked Sul E, or A, or D, or G, as the case may be.

Sul ponticello (It.). By the bridge; in violin playing, a direction to play with the bow close to the bridge.

Suonata. See *Sonata.*

Superfluous. Same as *Augmented.*

Super-octave. (1) An organ-stop of 2-foot pitch, same as fifteenth. (2) A coupler in the organ that pulls down the keys one octave above those struck.

Super-tonic. The 2d degree of the scale.

Super-dominant. The 6th degree of the scale.

Supplichevole (It.) (*sup-plee-kay'-vo-leh*), **Supplichevolmente** (*sup-plee-kay-vol-men'-teh*). Pleading; supplicating.

Suspension. Tying or prolonging a note from one chord into the following. See *Retardation.*

Süss (Ger.) (*sees*). Sweet.

Sussurando (It.) (*soos-soo-ran'-do*). Murmuring.

Sussurante (It.) (*soos-soo-ran'-teh*). Whisperingly.

Svegliato (It.) (*svehl-ya'-to*). Brisk; lively.

Svelto (It.) (*svel'-to*). Swift; quick; easy.

Swell Organ. A part of the organ enclosed within a box provided with shutters, which are opened and closed by a lever, called the swell-pedal, worked by the foot.

Symphony. See *Sinfonia.*

Symphonic. In the manner of a symphony.

Symphonic Ode. A combination of symphony and chorus, as Beethoven's Ninth Symphony, or Mendelssohn's Lobgesang.

Symphonic Poem. A modern name for an orchestral composition supposed to illustrate a poem or story.

Syncopation. A shifting of the accent, caused by tying a weak beat to a strong beat.

Syrinx. (1) Pandean Pipes, *q. v.* (2) Part of a hymn to Apollo sung in the Pythian games.

T

T. Abbreviation of Tasto, Tenor, Tempo, Tutti, Toe (in organ music).

Taballo (It.). Kettle-drum.

Tablature (Fr.) (*tab-lah-toor*), **Intavolatura** (It.), **Tablatur** (Ger.). An obsolete system of notation used for the lute principally; another form was used for the organ, harpsichord, etc.

Table (Fr.) (*tahbl*). The belly or sound-board.

Table Music. (1) Music intended to be sung by several people sitting around a table. (2) Music appropriate for entertainment during the pauses in the "serious" work of eating and drinking.

Tabor, Taboret, Tabret. A small drum, like a tambourine without the "jingles." It hung in front of the performer, who beat it with one hand and played a "pipe" or flageolet with the other.

Tacet (Lat.), **Tace** (It.) (*tah'-cheh*). Is silent, or be silent"; signifies that the instrument thus marked is silent during the phrase or movement; as **Tromboni tacent,** the trombones are silent.

Tafelclavier (Ger.). Square pianoforte.

Tafelmusik. Table music.

Tail. (1) Stem of a note. (2) The piece of wood to which the strings of the violin, etc. are attached at the base of the instrument.

Taille (Fr.) (*tah-ee*). The tenor voice or part.

Takt (Ger.). Time, as **Im Takt,** a tempo; measure, as **Ein Takt,** one measure (or bar); beat, as **Auftakt,** up beat.

Taktmässig. In time.

Taktstrich. A bar (line, not measure).

Talon (Fr.). The "frog" or heel of the bow.

Tambour (Fr.). (1) A drum. (2) A drummer.

Tambour de basque. Tambourine.

Tamboura, Tambura (also **Pandora**). An Eastern species of the lute.

Tambourin (Fr.) (*tam-boo-rang*). (1) A tabor. (2) A French rustic dance.

Tambourine. A small variety of drum consisting of a hoop of wood or metal about two inches in depth, with a head of parchment. Small circular plates of metal called jingles are inserted in pairs in holes in the hoop, strung loosely on wires. The tambourine is held in the left hand and struck with the fingers or palm of the right hand; used to accompany dancing in Spain, Italy, and Southern France; occasionally used in the orchestra in ballet music. The "roll" is indicated thus The "jingle"

Tamburo (It.). Drum; side drum.

Tamburone (It.) (*tam-boo-ro'-neh*). The great drum.

Tam-tam. Gong.

Tändelnd (Ger.) (*tehn-delnd*). Playful.

Tangent. The brass pin in the action of the clavichord that was forced against the string when the key was struck.

Tantino (*tan-tee-no*), very little.

Tanto (It.). So much; as much. **Allegro non tanto,** not so fast; lit., "fast, not too much."

Tanz (Ger.) (*tants*). Dance.

Tanzlieder. Songs to accompany dancing. See *Ballad.*

Tanzstücke. Dancing pieces.

Tanzweisen. Dancing tunes.

Tarantella (It.), **Tarantelle** (Fr.). A rapid dance in $\frac{6}{8}$ time; the name is derived from *tarantula* (the poisonous spider). The dance is popularly believed to be a remedy for the bite of this insect.

Tardamente (It.) (*tar-dah-men'-teh*). Slowly.

Tardando (It.) (*tar-dan'-do*). Slowing; retarding.

Tardato (It.) (*tar-dah'-to*). Made slower.

Tardo (It.) (*tar'-do*). Slow; dragging.

Tartini Tone. An undertone produced by the simultaneous vibration of two strings, etc., first observed by Tartini, the violinist. Called also a differential tone.

Tastatur (Ger.) (*tas-tah-toor*). **Tastatura** (It.) (*tas-tah-too'-ra*). Keyboard.

Taste (Ger.) (*tas'-teh*). A pianoforte or organ key; pedal key.

Tastenbrett (Ger.), **Tastenleiter.** Keyboard.

Tastiera (It.) (*tas-tee-eh'-ra*). Fingerboard of violin, guitar, etc. **Sulla Tastiera,** a direction in violin music to play with the bow near the fingerboard—the opposite of *Sul ponticello, q. v.*

Tasto (It.). A "touch." (1) A key. (2) A fret. (3) Touch. (4) Fingerboard. The preceding words from *Tastatur* are all derived from *Tasto.*

Tasto Solo. Literally, "key alone," *i. e.,* one key or note at a time. A direction in figured bass that the notes are to be played without chords, *i. e.,* unison or octaves.

Tattoo or **Taptoo.** The drumbeat ordering soldiers to retire for the night.

Technic, Technik (Ger.), **Technique** (Fr.). The purely mechanical part of playing or singing.

Technicon. A mechanism for strengthening the fingers and increasing their flexibility.

Techniphone. See *Virgil Clavier.*

Tedesco or **Tedesca, alla** (It.). In German style.

Tema (It.) (*teh'-mah*). Theme; subject; melody.

Temperament. The division of the octave. **Equal Temperament.** The modern system of tuning divides the octave into twelve equal parts, called semitones. **Unequal Temperament** (which was formerly used for all keyed instruments, and retained until quite recently for the organ) tuned the natural notes true, and distributed the superfluous interval among the "black" keys. The discovery of the art of equally tempering the scale lies at the foundation of modern music. Without it, the sudden excursions into remote keys would be impossible. Although we have lost something in purity of intonation, the loss is more than made up in the gain of twelve keys, all equally well in tune. Some enthusiasts, generally acousticians, express great dissatisfaction with our modern scale. A sufficient reply is, that the scale that satisfied the ears of, and made possible the music of the great writers from Bach to Beethoven, must of necessity be the best musical scale.

Tempestosamente (It.) (*tem-pes-to'-sa-men'-teh*). Impetuously.

Tempestoso (It.) (*tem-pes-to'-so*). Tempestuous.

Tempête (Fr.) (*tam-peht*). Tempest. A French dance—formerly fashionable—resembling a quadrille.

Tempo (It.). Time. "Tempo" is universally used to signify "rate of movement."

Tempo Indications—

Slow	Largo, Grave, Lento, Adagio.	Moderate	Andante. Moderato, Commodo.
		Fast	Allegro, Presto.

Words used to modify the above: *Poco,* a little. Before a word meaning *slow,* signifies an *increase* of speed, as *poco lento,* a little slow; before a word meaning *fast,* it signifies a *decrease* of speed, as *poco allegro,* a little fast. *Piu,* more. Before a word meaning *slow,* signifies a *decrease* of speed, as *piu lento,* slower; before a word meaning *fast,* it signifies an *increase* of speed, as *piu allegro,* faster. *Assai,* very. After a word meaning *slow,* decreases the speed, as *adagio assai,* very slow; after a word meaning *fast,* increases the speed, as *allegro assai. Molto,* much; has the same meaning as *assai.*

THE DIMINUTIVE *Etto*

Slow	Larghetto, a little faster than Largo. Adagietta, a little faster than Adagio.
Fast,	Allegretto, a little slower than Allegro.

THE SUPERLATIVE *Issimo*

Slow	Larghissimo, Lentissimo, Adagissimo,	As slow as possible.
Fast	Allegrissimo, Prestissimo,	Fast as possible.

THE DIMINUTIVE *Ino*

slow, Andantino, faster than Andante.

Andante means "going" [from *andare,* to go], therefore Andantino means "going a little." A large number of words are used in conjunction with the tempo indications that refer more to the manner or style of the performance than to the speed, as Appassionata, with passion; Vivace, with life.

The majority of these words are preceded by con, with; as

Con brio . . .	with vigor,	After words meaning fast.
Con calore . .	with warmth,	
Con fuoco . .	with fire,	
Con moto, etc. .	with motion,	
Con espressione .	with expression	After words meaning slow.
Con dolcezza .	with sweetness,	
Con dolore . .	with sadness,	
Con tristezza .	with sorrow,	

Tempo commodo. Convenient; easy movement.

Tempo di ballo. Dance time.

Tempo giusto. Strict; exact time.

Tempo marcia. March time.

Tempo ordinario. Ordinary; usual.

Tempo primo. First time, used after a ritard. or accel. to indicate a return to the original time.

Tempo rubato. See *Rubato.*

Tempo wie vorher (Ger.). Same as *Tempo primo.*

Temps (Fr.) (*tam*). (1) Time. (2) Beat.

Temps faible or **levé.** Weak beat; up beat.

Temps fort or frappé. Strong beat; down beat.

Tendrement (Fr.) (*tondr-mong*). Tenderly.

Tenendo il canto (It.). Sustaining the melody.

Teneramente (It.) (*teh-neh-ra-men'-teh*). Tenderly; delicately.

Tenerezza (It.) (*teh-neh-ret'-za*), **con.** With tenderness, delicacy.

Tenero (It.) (*teh'-neh-ro*). Tender; delicate.

Tenor, Tenore (It.), **Taille** or **Ténor** (Fr.). (1) The highest natural male voice. (2) In the old system of music, the cantus or plain song. (3) A common name for the viola. The word tenor is supposed to be derived from **Lat.,** *teneo,* to hold, as it *held* the melody.

Tenor Clef. C clef on 4th line.

Tenor Violin. Viola.

Tenore buffo. A comic tenor singer.

Tenore di grazia. A "smooth-singing" tenor singer.

Tenore leggiero. A light tenor singer.

Tenore robusto. A vigorous, strong tenor singer.

Tenorino (It.) (*ten-o-ree'-no*). "Little tenor." Falsetto tenor.

Tenorist. A tenor singer; also viola player.

Tenoroon. (1) See *Oboe di caccia.* (2) Any organ-stop of 8-foot tone that does not go below middle C.

Tenuto (It.) (*teh-noo'-to*). Abbreviated **Ten.** Hold; a direction to sustain the notes for their full value. Sign

Tepidita (It.) (*teh-pee'-dee-ta*), **con.** With indifference.

Tepiditamente (It.) (*teh-pee-dee-ta-men'-teh*). Coldly; lukewarmly.

Tercet (Fr.) (*tehr-say*). A triplet.

Ternary Form. Rondo with three themes.

Ternary Measure. Simple triple time.

Tertian. A two-rank stop, sounding the major 3d and 5th in the third octave above the fundamental.

Terz (Ger.) (*terts*), (It.) **Terza.** Third.

Terzetto (It.) (*tert-set'-to*). A vocal trio.

Terzflöte (Ger.). (1) A flute sounding a 3d above the written notes. (2) An organ-stop sounding the major 3d in third octave.

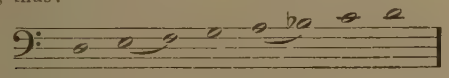
Tessitura (It.) (*tes-see-tu'-rah*). Texture. The general range of the voice included in a given song, etc.

Testo (It.) (*tehs'-to*). Text. (1) The "words" of any vocal composition. (2) The theme or subject.

Tetrachord [from Gr., *tetra, chordon*]. Four strings; hence, a succession of four sounds. The tetrachord always consists of two whole tones and one half-tone. These intervals may be arranged in three ways. The oldest arrangement, called the Pythagorean tetrachord, began with the half-tone, thus:

It is generally supposed that the original four-string lyre (called the tetrachordon) was tuned to these sounds. The addition of another tetrachord, beginning with the highest note of this one, gives the scale of the heptachord, or seven-string lyre, thus:

This is called the scale of conjunct tetrachords, the A being the note common to both. The addition of a note *below* this scale, thus:



gives the original octave scale of the lyre. This scale is the normal Greek scale, called the Dorian. It is doubtless the origin of the modern minor scale. The tetrachord known as Hucbald's had the half-tone in the middle, thus: D E F G.

The *Hexachord scales* (*q. v.*) were formed from the tetrachord by adding one letter above and one below, thus:

C D E F G A.

In the modern major scale the half-tone lies between the third and fourth letters of the tetrachord, thus: C D E F, and the scale consists of two of these tetrachords separated by a whole tone.

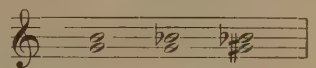
Tetrachordal System. The original name of the *Tonic Sol-fa, q. v.*

Theil or **Teil** (Ger.). A part (portion, not "voice").

Theme, Thème (Fr.) (*tehm*), **Thema** (Ger.) (*teh-ma*). The subject of a fugue; one of the subjects of a sonata or rondo. The subject of a set of variations. The "cantus" to which counterpoint is added.

Theorbo, Théorbe (Fr.). A large variety of lute.

Third. An interval including three letters, and, if major, two whole tones; if minor, three half-tones; if diminished, two half-tones:



Thirty-second Note

Thorough Bass, Figured Bass, Continued Bass. A system of musical short-hand originally; now used as a means of teaching harmony.

Threnody [Gr. *threnos*]. A song of mourning; dirge.

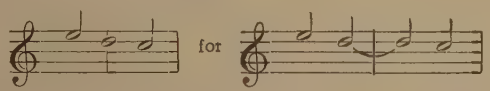
Thumb Position. Violoncello music; sign 0, the thumb is laid across the strings, making a temporary bridge.

Tibia (Lat.). The "shinbone." Latin name for the flute, which was originally made from the bone, the name of which it bears.

Tibia Utricularis. Bagpipe.

Tibicen (Lat.). A flute player.

Tie, Fascia (It.), **Bindebogen** (Ger.), **Liaison** (Fr.). A curved line joining two notes on the same degree. The first note is sounded, the second is "held." In old editions, in place of the tie, it was customary to write a single note on the bar-line, equal in value to the two notes that in modern practice are tied. Thus:



Any number of notes may be tied. The sign must be repeated for each one, thus:

The first note is struck, but the sound is prolonged until the time value of all has expired.

Tief (Ger.). Deep; low.

Tierce. (1) A third. (2) An organ-stop. See *Terz.*

Tierce de picardie (Fr.). The major 3d in place of the minor in the final chord of a piece in the minor key. At one time this manner of ending was the rule.

Tierce Position. A common chord with root in bass and third at top.

Timbale (Fr.), **Timballo** (It.). Kettle-drum.

Timbre (Fr.) (*tambr*). Quality of tone. In German *Klangfarbe,* for which *Clangtint* has been proposed as an English equivalent.

Timbrel. Tambourine.

Time. (1) The division of music into portions marked by the regular return of an accent. All varieties of time are founded on two units—the Binary = 1 2, and Ternary = 1 2 3. Time signatures for the most part are formed from figures written like fractions, the upper figure giving the rhythmic units and the number of times the value of the note indicated by the lower figure occurs in the measure. Time is Simple Binary when the upper figure is 2; Simple Ternary, when the upper figure is 3. Compound times are formed by adding together two or more of the time units. When the number of accents resulting from this combination are *even,* it is called Compound Common time; when they are odd, Compound Triple time. Simple Duple time is indicated by this sign C. As now used, it always means the value of a whole note in the measure, and is called Alla Capella time. Like all duple times, it must have but one accent in the measure, no matter how the time value of the measure may be divided. The first compound of Duple time, viz., $\frac{4}{4}$ time, is often marked C and is called Common time, under the impression that the sign is the letter C, whereas it is the old sign for Imperfect time, viz., a broken

circle, and originally meant two beats in the measure. Three beats was called Perfect time; the sign was ○. With the exception of the times with 4 for the upper figure, all the compound times are multiples of the ternary unit, as $\frac{6}{2}$, $\frac{6}{4}$, $\frac{6}{8}$, $\frac{12}{4}$, $\frac{12}{8}$, $\frac{12}{16}$, etc., Compound Common; $\frac{9}{4}$, $\frac{9}{8}$, $\frac{9}{16}$, Compound Triple. The accents in compound times are determined by the number of units in the measure. The first is the strongest, third next, the second is weak, the fourth weaker.

In Compound Triple, the second and third are both weak.

Timidezza (It.) (*tee-mee-det'-za*), **con.** With timidity.

Timorosamente (It.) (*tee-mo-ro-sa-men'-teh*). Timorously.

Timoroso (It.) (*tee-mo-ro'-so*). Timorous; hesitating.

Timpani (It.) (*tim'-pa-nee*). Kettle-drums. Abbreviated **Timp.**

Timpanista (It.). Player on the kettle-drums.

Tirade (Fr.) (*tee-rad*). A rapid run or scale passage.

Tirasse (Fr.) (*tee-rass*). A pedal keyboard that "draws down" the manual keys.

Tirata (It.) (*tee-rah'-tah*). See *Tirade.*

Tirato (It.), **Tiré** (Fr.) (*tee-reh*). "Drawn" bow, *i. e.,* down bow.

Toccata (It.) (*tok-kah'-tah*) [touched, from *toccare,* to touch]. (1) A prelude or overture. (2) A brilliant composition resembling somewhat the modern "Étude" for piano or organ.

Toccatina (It.) (*tok-kah-tee'-nah*). A little toccata.

Toccato (It.). A bass trumpet part.

Todtenmarsch (Ger.) (*tote'-ten marsh*). Funeral march.

Ton (Ger.), **Ton** (Fr.). Tone; sound; pitch; scale.

Tonal Fugue. A fugue in which the answer is slightly changed to avoid modulation.

Tonality. Character or quality of tone; key.

Tonart (Ger.). Key.

Tonbildung. Tone production.

Tondichter. Tone poet.

Tondichtung. Tone poem.

Tone. (1) Sound. (2) Quality of sound. (3) Interval of major second. (4) A Gregorian chant.

Tongue. (1) See *Reed.* (2) (verb) To interrupt the sound of a wind instrument by raising and lowering the tip of the tongue, as in the act of pronouncing the letter T. **Double-tonguing** is produced by a like action of the tip and the middle of the tongue; **Triple-tonguing,** by the tip, the middle, and the tip.

Tonkunst. Tone art; music.

Tonkünstler. Composer; artist in tone.

Tonic. The keynote of a scale, whether major or minor.

Tonic Chord. The common chord of which the tonic is the root.

Tonic Secion. That part of the sonata or rondo that is the principal key; the first theme.

Tonic Sol-fa. A system of musical notation in which the syllables doh, ray, me, fah, soh, lah, te, with certain modifications, are used in place of notes, staff, clefs, and all the ordinary characters of musical notation. The Tonic Sol-fa is based on the assumption, amply proved by experience, that the mental association between a succession of sounds and a succession of syllables helps materially to fix the former succession in the memory. The principle of the Tonic Sol-fa system is as old as the time of Guido; the modern development of it originated with Miss Sarah Ann Glover, of Norwich, England, in 1812, and was perfected by the Rev. John Curwen about thirty years later.

Tonleiter. Tone ladder; scale.

Tonsetzer. Composer; tone setter.

Tonstück. Tone piece; composition.

Tonstufe. Tone step; a degree in the scale.

Tostamente (It.) (*tos-tah-men'-teh*). Quickly.

Tostissimo (It.) (*tos-tis'-see-mo*), **Tostissamente** (*tos-tis-sah-mah-men'-teh*). Fast as possible.

Tosto (It.). Quick. **Piu tosto,** faster.

Touch. (1) The resistance of the keys of the pianoforte or organ. (2) The manner in which a player strikes the keys.

Touche (Fr.) (*toosh*). Digital; key; fret; fingerboard.

Toucher (Fr.) (*too-shay*). To "touch"; play the pianoforte.

Toujours (Fr.) (*too-zhoor*). Always; as, Toujours piano, always soft.

Tradotto (It.) (*trah-dot'-to*). Transcribed; arranged.

Tragen der Stimme (Ger.). Carrying of the voice. See *Portamento.*

Trainé (Fr.) (*tray-nay*). Slurred; legato.

Trait (Fr.) (*tray*). A run; passage; sequence.

Tranquillamente (It.). Quietly; composedly.

Tranquillita, con (It.). With tranquillity.

Tranquillo (It.). Tranquil; quiet.

Transcription. The arrangement of a vocal composition for an instrument, or of a composition for some instrument for another.

Transient Modulation. A short excursion into a non-related key.

Transition. (1) An abrupt modulation. (2) The connecting passages between the themes of a rondo or sonata.

Transpose. To change the key of a composition to one higher or lower.

Transposing Instruments. Instruments whose sounds do not correspond with the written notes; as horns, clarionets, trumpets, etc.

Transverse Flute. See *Flute.*

Trascinando (It.) (*trah-shee-nan'-do*). Dragging; retarding.

Trattenuto (It.) (*trat-teh-noo'-to*). Held back; retarded.

Trauermarsch (Ger.). Funeral march.

Traurig (Ger.) (*trow'-rig*). Mournful; sad.

Traversflöte (Ger.). See *Flute.*

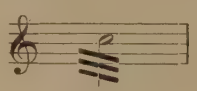
Tre (It.) (tray). Three.

Tre corde. Three strings, used in pianoforte music to signify a release of the una-corda pedal.

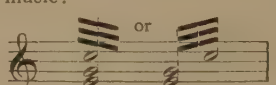
Treble. (1) The highest part in vocal music for mixed or female voices. (2) The G clef on second line. (3) The first violin in quartet, and the flute, oboe, and clarinet in the orchestra generally.

Treibend (Ger.). Hastening; accelerando.

Tremando (It.) (*treh-man'-do*), **Tremolando** (It.) (*treh-mo-lan'-do*), **Tremolo** (It.) (*treh'-mo-lo*). Abbreviation **Trem.** The rapid reiteration of a note or chord. In music for string instruments written thus:



In pianoforte music:



Tremoloso (It.) (*treh-mo-lo'-so*). Tremulously.

Tremulant, Tremolante (It.), **Tremblant** (Fr.) (*trom-blont*). A mechanism in the organ that causes the sound to waver.

Tremulieren (Ger.). To trill or to sing. See *Vibrato.*

Trenchmore. An old English dance in $\frac{6}{8}$ time.

Trenise (Fr.). A figure in the quadrille.

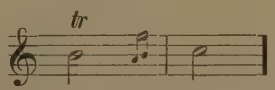
Très (Fr.) (*tray*). Very; as, **Très vite,** very fast.

Triad. A chord of three sounds; a common chord, consisting of root, 3d major or minor, and 5th. If the 5th is diminished, it is called a diminished triad; if augmented, an augmented triad.

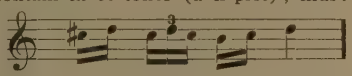
Maj. *Min.* *Dim.* *Aug.*

Triangle. A pulsatile instrument, consisting of a steel rod bent into an equilateral triangle. Struck with a small steel rod, it gives a very clear penetrating sound.

Trill, Trillo (It,). **Trille** (Fr.), **Triller** (Ger.). The trill, or shake, is the rapid iteration of the written note and the note above, indicated by the sign, *tr*_____ The trill continues to the end of the waved line. The oldest form or trillo was a mere repetition of a tone. The oldest form of the modern shake was held to be derived from appoggiaturas and their resolutions. Until the time of Beethoven, the trill beginning with upper auxiliary note was most generally used. However, the present method of beginning with the principal tone was gradually gaining the attention of writers.

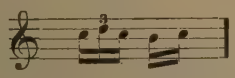
The trill is generally finished with a turn. The after-turn is usually written out at the close of the trill, but whether or not this be so, the trill is not complete without this closing beat:

To make the trill symmetrical with an after-turn, an additional tone is inserted, just before the close, otherwise there will be a break between the last and the next to the last beats; thus:

This gap beween D and B is filled by the insertion of an additional principal tone, which will make the next to the last beat contain three tones (a triplet); thus:



This makes a satisfactory close to a trill, the two beats (five notes) making a complete turn of quintuplet form.

Many writers call this (quintuplet) the turn of the trill, but properly speaking the after-turn of the trill is only the last beat, the triplet preceding being a real part of the trill. From this it will be seen that the beats of a trill may be either twofold or threefold, and the smallest complete trill, according with the modern acceptation of the correct form of the embellishment, would be with two beats, five notes; thus:



The rapidity of a trill is reckoned by the number of beats, not by the number of tones, sounded within a given note's time. The trill upon a long note has no positive number of beats, this being decided, in case there is no particular accompanying figure, by the character of the composition and also measurably by the ability of the interpreter. The after-turn, however, should always be played in the same time as the trill, regardless of the size of note used for its representation in the notation.

Trinklied (Ger.). Drinking song.

Trio (It.) (*tree-o*). (1) A composition for three voices or instruments. (2) One of the parts of a minuet or march, etc. The origin of its application is very uncertain.

Triole (Ger.), **Triolet** (Fr.). A triplet.

Triomphale (*tree-om-fal*), **Triomphant** (Fr.) (*tri-om-font*), **Trionfale** (*tree-on-fah'-leh*), **Trionfante** (It.) (*tree-on-fan'-teh*). Triumphant; triumphal.

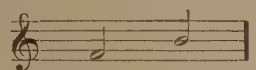
Triple Counterpoint. One so contrived that the three parts may change places, each one serving as bass, middle, or upper part.

Triplet, Triole (Ger.), **Triolet** (Fr.), **Tripla** (It.), or **Tripola.** Three notes played in the time of two of the same value.

Triple Time. See *Time.*

Tristezza (It.) (*tris-tet'-za*), **con.** With sadness; sadly.

Tritone [Lat., *tritonus,* three tones], **Triton** (Fr.), **Tritono** (It.). The interval of the augmented 4th, as:



Trois (Fr.) (*tro-a*). Three.

Trois temps. Triple time.

Troll [from Ger., *trollen,* to roll about]. (1) (verb) To sing a catch or round. (2) (noun) A catch or round.

Tromba (It.). Trumpet; a brass instrument of piercing, brilliant tone quality.

Tromba marina (It.). Marine trumpet.

Trombetta (It.). A small trumpet.

Trombone, Posaune (Ger.). (1) A brass instrument with a sliding tube, by means of which the pitch may be varied. Three trombones are used in the modern orchestra, viz., alto, tenor, and bass. A smaller trombone formerly used was called the Descant Trombone. (2) A reed stop of 8-, 16-, or 32-foot pitch in the organ.

Trommel (Ger.). Drum.

Trompe (Fr.). Hunting horn.

Trompe de bearn. Jew's-harp.

Trompette (Fr.). Trumpet.

Troppo (It.). Too much. **Allegro non troppo,** "Allegro," not too much.

Troubadour, Trouvère (Fr.), **Trovatore** (It.). The poet musicians of the eleventh century, in southern France, Italy, and Spain. The troubadours originated in Provence. From thence their "gentle art," or "gay science," as it was called, spread over Europe.

Trübe (Ger.) (*tree'-beh*). Gloomy; dismal.

Trumpet. See *Tromba.*

Tuba (Lat.). (1) Trumpet. (2) A bass instrument of the saxhorn family, frequently used with, or in place of, the bass trombone.

Tuba mirabiles (Lat.). Tuba "wonderful." A reed-stop in the organ with heavy wind pressure, 8- or 16-foot tone.

Tumultuoso (It.) (*too-mul-too-o'-so*). Agitated; tumultuous.

Tune. (1) Air; melody. (2) Just intonation.

Tuner. One who adjusts the sounds of an instrument to the standard and relative pitch.

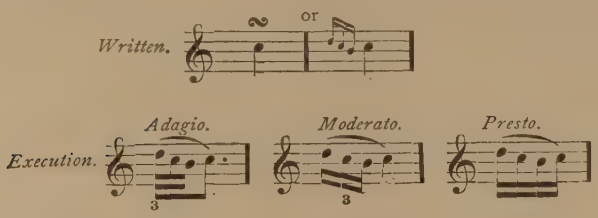
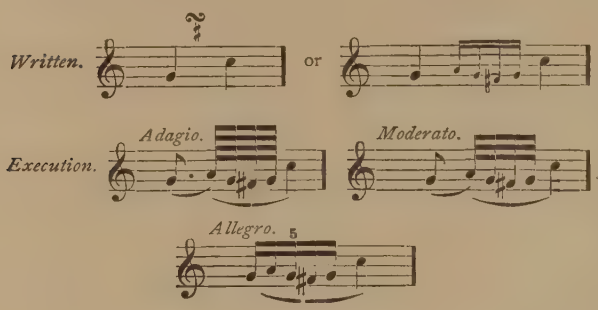
Tuono (It.). (1) Sound. (2) Mode.

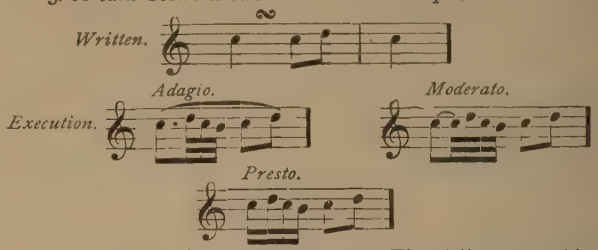
Turca, alla (It.). In the Turkish manner.

Turkish Music or **Janissary Music.** Drums, cymbals, gongs, etc., to produce noise.

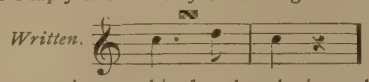
Turn. (Abridged from Russell's "Embellishments of Music.") The Turn partakes in its delivery somewhat of the char-

acter of the composition in which it appears, and should be played (or sung), according to Louis Köhler, broad in slow tempo, light and flowing in brighter movements, and always legato. It may be broadly divided into four classes:

1. The symbol ∾ placed over the note ( ), or the note preceded by the embellishment written in full.

2. A turn between two notes on different degrees (or four small notes between).

3. A turn between two notes of similar pitch.



4. The turn after a dotted note. The delivery of this turn is the same as the third class in its effect, since the dot is simply another way of writing a second similar note.



An exception to this fourth rule is made if the dotted note with turn directly precedes a close (possibly forming part of the cadence) and is followed by two notes of equal value leading up or down to the closing notes of the phrase.

Tutta (It.). **All. Con tutta forza.** With full power.

Tutti (It.) (*too-tee*). In scores, a notification to all the performers and singers to take part.

Tuyau (Fr.). Pipe.

Tuyau d'orgue. Organ pipe.

Tuyau à anche. Reed pipe.

Tuyau à bouche. Flue pipe.

Twelfth. An organ stop sounding the 12th above the diapason.

Tympani. See *Timpani.*

Tyrolienne (Fr.) (*tee-rol-yen*). (1) A Tyrolese song for dancing. (2) Tyrolese song with yodel.

U

U. C. Abbreviation of Una corda, one string.

Übergang (Ger.) (*e'-ber-gangk*). Passage; transition; modulation.

Übung (Ger.) (*e'-boonk*). Exercise; study; practice.

Uguale (It.) (*oo-gwah'-leh*). Equal.

Ugualmente (It.) (*oo-gwahl-men'-teh*). Equally; evenly.

Umfang (Ger.) (*oom-fangk*). Compass.

Umore (It.) (*oo-mo'-reh*), **con.** With humor.

Umstimmung (Ger.) (*oom-stim-moonk*). The change of the pitch of a brass instrument by the addition or change of "crooks"; the change of the pitch of kettle-drums.

Un (It.) (*oon*), **Una** (*oo'-nah*), **Uno** (*oo'-no*). One; as, **Una voce,** one voice.

Un or **Une** (Fr.) (*ong, oon*). One.

Unda maris (Lat.). "Wave of the sea." The vox celestis, an organ-stop, 8-foot pitch, with a tremulous tone.

Unessential Dissonances. Those that occur by suspension, the essential dissonances being the 7th and 9th, and, according to some authorities, the 11th and 13th over the dominant.

Unessential Notes. Passing and changing notes.

Ungarisch (Ger.). Hungarian.

Ungeduldig (Ger.). Impatiently.

Ungestüm (Ger.). Impetuous; con impeto.

Unison. Sounds consisting of the same number of vibrations per second. The term "unison passage" is applied to vocal or instrumental parts in the octave also.

Unisono (It.) (*oo-nee-so-no*). Unison.

Unisson (Fr.) (*oo-nis-song*). Unison.

Un poco (It.). A little.

Un pochino (It.) (*po-kee'-no*), **Un pochettino** (*po-ket-tee'-no*). A very little.

Unruhig (Ger.) (*oon-roo'-ig*). Restless.

Unschuldig (Ger.) (*oon-shool-dig*). Innocent.

Up bow. In violin playing, the motion of the bow from the point to the nut. The sign is ∨; the down bow ⊓.

Ut (Fr.) (*oot*). The note C; the first of the Aretinian syllables, changed in Italy to *do,* a better vowel sound for solfeggio.

Ut (Lat.). As; like. **Ut supra,** as before.

V

V. Abbreviation of Violino, Voce, Volta.

V-cello. Abbreviation of Violoncello.

Vla. Abbreviation of Viola.

Va (It.). Go; as, **Va crescendo,** go on getting louder.

Vacillando (It.) (*vat-chil-lan'-do*). "Vacillating." A direction to play without strict regard to time.

Vago (It.). Vague; dreamy.

Valse (Fr.) (*vals*), **Valce** (It.) (*val-cheh*). Waltz; a dance of German origin in ¾ time.

Valse à deux temps (Fr.) (*doo tomp*). A species of waltz with two steps to each measure.

Value. The value of a note or rest is its relative duration, the standard being the whole note or rest, which may be divided into half, quarter, eighth, sixteenth, thirty-second

notes, etc. The value of a note is increased one-half by placing a dot after it; a second dot adds to its value an amount equal to half that of the first. The absolute value of a note depends upon the tempo, *i. e.*, rate of movement of the piece in which it occurs.

Valve. See *Piston.*

Variante (Fr.) (*vah-ree-ongt*). A variant; other reading.

Variations, Variationen (Ger.) (*fah-ree-a-tse-o'-nen*), **Variazioni** (It.) (*va-ree-at-zee-o'-nee*). Melodic, rhythmic, and harmonic modifications of a simple theme, each one more elaborate than the last.

Varie (Fr.) (*vah-ree*), **Variato** (It.) (*var-ya'-to*). Varied; with variations.

Varsovienne (Fr.) (*var-so-vee-en*), **Varsovianna** (It.) (*var-so-vee-an'-na*). A dance in $\frac{4}{4}$ time resembling the mazurka, invented in France.

Vaudeville (Fr.) (*vode-veel*). A light operetta consisting of dialogue interspersed with songs; the name is said to come from Vaux de Vire in Normandy.

Veemente (It.) (*veh-eh-men'-teh*). Vehement; forceful.

Veemenza (It.) (*veh-eh-men'-tza*), **con.** With vehemence.

Velato (It.) (*veh-lah'-to*), **Voce velato,** a veiled voice, *i. e.*, lacking in clearness and resonance.

Vellutata (It.) (*vel-loo-tah'-tah*). Velvety; smooth.

Veloce (It.) (*veh-lo'-cheh*). Rapid; swift.

Velocissimamente (It.) (*veh-lo-chis-see-ma-men'-teh*). Very swiftly.

Velocissimente (It.) (*veh-lo-chis-see-men'-teh*). Swiftly.

Velocita (It.) (*veh-lo'-chee-tah*), **con.** With rapidity.

Ventage. The holes in the tubes of wind instruments, the opening or closing of which by the finger-tip or by valves worked by keys alters the pitch by varying the sounding length of the tube.

Ventil. (1) Valve; piston. (2) In the organ a contrivance for cutting off the wind from a part of the organ.

Venusto (It.) (*veh-noos'-to*). Graceful; fine.

Veränderungen (Ger.) (*fer-an'-de-roong-en*). Variations.

Vergnügt (Ger.) (*fehr-gneegt'*). Pleasant; cheerful.

Verhallend (Ger.). See *Morendo.*

Verlöschend (Ger.) (*fehr-lesh'-end*). See *Morendo.*

Vermittelungsatz (Ger.) (*fehr-mit'-tel-oonk-sotz*). A subsidiary part; episode in sonata, etc.

Verschiebung (Ger.) (*fehr-shee'-boonk*), **mit.** Use "soft pedal."

Verschwindend (Ger.) (*fehr-shwin'-dend*). Dying away.

Versetzung (Ger.) (*fehr-set'-soonk*). Transposition.

Verspätung (Ger.) (*fehr-spay'-toonk*), **Verweilend** (*fehr-wei'-lent*), **Verzögernd** (*fehr-tseh'-gernt*). Delaying; retarding.

Verve (Fr.) (*vehrv*). Spirit. **Avec verve,** with spirit.

Verzweiflungsvoll (Ger.) (*fehr-tsvy'-floonks-foll*). Lit., full of desperation. Despairingly.

Vezzoso (It.) (*vets-so'-so*), **Vezzosamente** (*vets-so-sa-men'-teh*). Beautiful; graceful; gracefully.

Vibration. The rapid motion to and fro that produces the phenomena of sound by setting up a wave-motion in the air.

Vibrato (It.) (*vee-brah'-to*), **Vibrante** (*vee-bran'-teh*). "Vibrating" with strong, "intense" tone; vocal music, heavy accent in piano playing.

Viel (Ger.) (*feel*). Much; many.

Vielle (Fr.) (*vee-el'*). Rote; hurdy-gurdy.

Vier (Ger.) (*feer*). Four.

Vierstimmig. Four-voiced. **Vierfach,** fourfold.

Vif (Fr.). Lively.

Vigorosamente (It.) (*vee-go-ro-sa-men'-teh*). Vigorously; boldly.

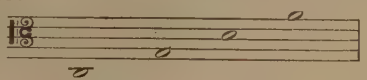
Vigoroso (It.) (*vee-go-ro'-so*). Vigor; force.

Villancico (Sp.) (*veel-lan'-thee-co*). Originally a species of song or madrigal, later a motet sung in church at certain services.

Villanella (It.). An ancient Italian folk-song.

Viol. The precursor of the violin. Viols were made in sets of six called a "chest of viols"; the smallest was about the size of the modern viola, and all were provided with frets.

Viola. The alto violin, generally called the tenor. The viola is slightly larger than the violin, and has four strings tuned as follows:



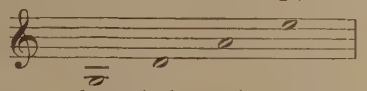
Music for it is written with the C clef on the third line.

Viola da braccia (arm viola), **Viola da gamba** (leg viola), **Viola da spalla** (shoulder viola), **Viola pomposa.** Obsolete varieties of the viola family. The last was the invention of J. S. Bach.

Viole (Fr.). Viola.

Viole d'amor (Fr.) (*d'ah-moor*), **Viola d'amore** (It.) (*d'ah-mo-reh*). A variety of the viola with wire sympathetic strings in addition to the usual gut strings.

Violin, Violon (Fr.), **Violino** (It.), **Fiddle, Geige** (Ger.). The words "violin" and "fiddle" both come from the Latin *vitula* or *fitula,* a mediæval form of string instrument played with a bow. The violin has four strings, tuned as follows:



The strings are of gut, the lowest, or G string, covered with thin wire.

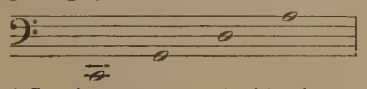
Violin Clef. The G clef on the second line.

Violina. A 4-foot organ-stop with string-like tone.

Violino principale (It.) (*prin-chee-pah'-leh*). The solo violin, or leader of the violins.

Violino ripieno. A violin part only used to fill up the tutti.

Violoncello (It.). The "little violone." The violoncello has four strings of gut, tuned an octave below the viola:



The C and G strings are covered with wire.

Violonar (Fr.). Double bass.

Violonaro (Fr.). See *Octo Bass.*

Violone (It.). The double bass, *q. v.*

Virgil Clavier. A soundless keyboard for practice.

Virginal. A small instrument of the harpsichord family.

Virtuoso (masc.) (It.) (*vir-too-o'-so*), **Virtuosa** (fem.) (*vir-too-o'-sah*). An eminent skilled singer or player. The word was formerly used in the same sense as "amateur."

Virtuos (Ger.), **Virtuosin** (fem.) (Ger.), **Virtuose** (Fr.). Virtuoso.

Vista (It.). Sight. **A prima vista,** at first sight.

Vistamente (It.) (*vis-tah-men'-teh*), **Vitamente** (It.) (*vee-tah-men'-teh*), **Vive** (Fr.) (*veev*), **Vivente** (It.) (*vee-ven'-teh*), **Vivido** (It.) (*vee'-vee-do*), **Vivezza** (*vee-vet-za*), **con.** Lively; briskly; with animation; vividly.

Vivace (It.) (*vee-vah'-cheh*), **Vivacemente** (*vee-vah-cheh-men'-teh*), **Vivacita** (*vee-vah'-chee-tah*), **con, Vivacezza** (*vee-vah-chet'-zah*). Lively; rapid; with animation; with vivacity.

Vivacissimo (*vee-vah-chis'-see-mo*). Very lively and fast.

Vivo (It.) (*vee-vo*). Alive; brisk.

Vocal. Belonging to the voice; music meant to be sung or well designed for singing.

Vocalion. A variety of reed organ in which the quality and power of the tone is much modified by resonators.

Vocalise (Fr.) (*vo-cal-ees*), **Vocalizzi** (It.) (*vo-cah-lit'-zee*). Vocal exercises.

Vocalization. (1) The manner of singing. (2) The singing of studies—solfeggio—to one or more vowel sounds.

Voce (It.) (*vo-cheh*). The voice.

Voice. (1) The sound produced by the human organs of speech. (2) A part in a polyphonic composition. There are three well-marked varieties of the male and female voice. Male voices are divided into bass, baritone, and tenor; the analogues in the female voice are alto, mezzo soprano, and soprano.

Voicing. Regulating the quality and power of the tone of organ-pipes.

Voix (Fr.) (*vo-a*). Voice.

Voix celeste (Fr.). Vox angelica.

Volante (It.) (*vo-lan'-teh*). "Flying." The rapid, light execution of a series of notes.

Volkslied (Ger.) (*folks-leed*). Popular song.

Voll (Ger.) (*foll*). Full.

Volonté (Fr.) (*vo-lon-teh*), **A volonté.** At will; a piacere.

Volta (It.). Turn. **Una volta,** first turn or first time.

Volti (It.) (*vol'tee*) (verb). Turn. **Volti subito,** abbreviated V. S., turn over (the page) rapidly.

Voluntary. An organ solo before, during, or after church service, frequently extemporary.

Vordersatz (Ger.) (*for'-der-sots*). Principal theme; sonata.

Vorspiel (Ger.) (*for-speel*). Prelude; overture; introduction.

Vox (Lat). Voice.

Vox celestis, Vox angelica. See *Unda maris.*

Vox humana. An organ-stop imitating the human voice. (Fr. *Voix humane*).

Vuide (Fr.) (*voo-eed*), **Vuoto** (It.) (*voo-o-to*). Open. **Corde vuide, Corda vuide,** open string, *i.e.,* a string of instruments of violin family sounded without being touched by the finger.

W

Waits, Waytes, Waightes. Watchmen who "piped the hours" at night on a species of hautboy called a wait, or shawm. In modern times "Christmas waits" are parties of singers who go from house to house collecting pennies on Christmas Eve.

Waldflöte (Ger.) (*volt-flay-teh*). Forest flute; a 4-foot open organ-stop. **Waldquinte** is a 12th with the same tone quality.

Waldhorn (Ger.). Forest horn; hunting horn; the French horn without valves.

Waltz. See *Valse.*

Walze (Ger.) (*vol'-tseh*). A run, alternately ascending and descending; a "roller."

Wankend (Ger.). Hesitating.

Wärme (Ger.) (*vehr'-meh*). Ardor; warmth.

Wehmut (Ger.) (*veh'-moot*). Sadness.

Wehmütig (Ger.). Sad; melancholy.

Weich (Ger.). Weak; soft; minor.

Weinend (Ger.). Weeping; lamenting.

Well-tempered (Wohltemperirtes) Clavier (Ger.). A title given by Bach to a set of preludes and fugues in all the keys. See *Temperament.*

Wenig (Ger.). Little; un poco.

Whistle. A small flue-pipe or flageolet; the first step in advance of the pandean pipe, *i. e.,* a tube blown across the top.

Whole Note.

Whole Step. A whole tone.

Wie (Ger.). As; the same. **Wie vorher,** as before.

Wiederholung (Ger.) (*wee-dehr-ho'-loonk*). Repetition.

Wiegenlied (Ger.) (*wee'-gen-leed*). Cradle song; berceuse.

Wind Band. (1) The wind instruments in the orchestra. (2) A band composed of wind instruments only, called also a harmony band.

Wolf. (1) The dissonant effect of certain chords on the organ or pianoforte tuned in unequal temperament. See *Temperament.* (2) Certain notes on the violin or other bow instruments that do not produce a steady, pure tone.

Wood-stops. Organ-stops with wooden pipes.

Wood-wind. The flute, oboe, clarionet, and fagotto in the orchestra.

Wuchtig (Ger.). Weighty; emphatic.

Würde (Ger.). Dignity. **Mit Einfalt und Würde,** with simplicity and dignity.

Wütend (Ger.). Raging; furioso.

X Y Z

Xylophone, Strohfiedel (Ger.), **Claquebois** (Fr.), **Gigelira** (It.). An instrument consisting of strips of wood graduated to produce the diatonic scale. They are supported on ropes of straw, etc., and are struck by hammers held one in each hand. An ingenious form of the xylophone is found in Africa, called the marimba. From Africa it was brought to South America, where it has been greatly enlarged by the Negroes of Guatemala.

Yodel, Jodel, Jodeln. See *Jodeln.*

Zampogna (It.) (*zam-pone'-ya*). A bagpipe; also a harsh-toned species of hautboy.

Zapateado (Sp.) (*tha-pah-te-a'-do*). "Stamping." A Spanish dance in which the rhythm is marked by stamping.

Zarabanda (Sp.) (*tha-ra-ban'-da*). See *Saraband.*

Zart, Zärtlich (Ger.). Tender; tenderly; suave.

Zartflöte (Ger.). A soft-toned flute in the organ.

Zeitmass (Ger.). Tempo.

Zelo (It.) (*zeh'-lo*). Zeal; earnestness.

Zelosamente (It.) (*zeh-lo-sah-men'-teh*). Earnestly.

Zeloso (It.) (*zeh-lo'-so*). Zealous; energetic.

Ziemlich (Ger.) (*tseem'-lich*). Moderately. **Ziemlich langsam,** moderately slow.

Ziganka. A Russian peasant dance in $\frac{2}{4}$ time.

Zimbalon, Cymbal, Czimbal. The Hungarian dulcimer.

Zingaresca (It.) (*zin-gah-res'-ca*), **Zigeunerartig** (Ger.) (*tsee-goy'-ner-ar-tig*). In Gypsy style.

Zinke (Ger.). Cornet; an obsolete variety of hautboy.

Zither (Ger.) (*tsit'-ter*). A string instrument consisting of a shallow box over which pass two sets of strings—one set of gut for the accompaniment, the other, of steel and brass, pass over a fretted fingerboard; on these the melody is played. The notes are stopped by the left hand, and the melody strings are struck by a plectrum attached to a ring on the thumb of the right hand; the accompaniment is played by the first, second, and third fingers of the right hand.

Zitternd (Ger.). Trembling.

Zögernd (Ger.). Hesitating; retarding.

Zoppo (It.). Lame. **Alla zoppo,** halting; limping; syncopated.

Zukunftsmusik (Ger.). Music of the future. The music of Wagner and his disciples is thus called by both friend and enemy, but with different meanings.

Zunehmend (Ger.). Crescendo.

Zurückhaltend (Ger.) (*tsoo-reek'-hal-tend*). Retarding.

Zwischensatz (Ger.). An episode.

Zwischenspiel (Ger.). "Between play"; interlude.

BIOGRAPHICAL DICTIONARY OF MUSICIANS

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A

Abbott, Emma. Soprano; U. S. A. B. 1849; d. 1891.

Abt (*apt*), **Franz** (1819-85). A native of Eilenburg, Germany. Originally a theological student. Wrote a great number of songs which are widely popular.

Adam, Adolphe Charles (1803-56). French operatic composer. A native of Paris. Best known through his opera, "Le Postillon de Lonjumeau."

Agramonte (*ah-gra-mon'-teh*), **Emilio.** Vocal teacher. B. 1844.

Alard, Delphin (*ah-lard, del-feen*). Violinist; France. B. 1815; d. 1888.

Alary, Guilio Eugenio Abramo (*ah-lah'-ree, ju'-lio eu-jeh'-ne-o ah-bra'-mo*). Composer; Italy. B. 1814; d. 1891.

Albani (*al-bah'-nee*), stage name of **Marie Louise Cecilia Emma Lajeunesse.** One of the greatest and most popular sopranos of recent times. Born at Chambly, near Montreal, in 1851. Later removed with her parents to Albany, N. Y., whence her pseudonym, "Albani." Studied in Paris and Milan. Equally fine in oratorio and opera. In 1878 married Ernest Gye.

Albert, Charles L. N. d'. Writer of band music; Germany. B. 1809; d. 1886 in London.

Albert, Eugen d'. Pianist. A native of Glasgow. Born 1864. Studied under Pauer, Sullivan, Stainer, and Prout. Was afterward a pupil of Liszt.

Alboni, Marietta (*al-bo'-nee, mar-yet'-ta*). Contralto; Italy. B. 1823; d. 1894.

Albrechtsberger (*al'-brekhts-berkh-er*), **Johann Georg** (1736-1809). Organist, composer, and theorist. Born at Klosterneuburg, near Vienna. His "Guide to Composition," and "School of Thorough-bass," have outlived his compositions.

Allegri (*al-la'-gree*), **Gregorio** (1560-1652). A Roman composer; disciple of Palestrina. Wrote the celebrated "Miserere," for two choirs of nine voices, sung in the Sistine Chapel, and which the youthful Mozart wrote out from memory, it being forbidden to furnish strangers with a copy of this work.

Amati, Andrea (*a-mah'-tee*). First of a famous family of violin-makers at Cremona; Italy. B. 1520; d. 1577.

Amati, Antonio. Son of Andrea. B. 1550.

Amati, Geronimo (*jeh-ro'-nee-mo*), son of Andrea. B. ——; d. 1635.

Amati, Nicolo (*nee-co-lo'*), son of Geronimo. B. 1596; d. 1684.

Ambros, August Wilhelm (1816-76). Composer and littérateur. Most widely known in latter capacity. Born at Mauth, Bohemia. Held a number of official appointments in connection with music, first at Prague, and afterward in Vienna. An active contributor to Schumann's "Neue Zeitschrift für Musik." His unfinished "Musical History" is a very valuable work.

Ambrose, St. Established the Ambrosian Chant; Gaul. B. 340; d. 398.

André (*an-dray*), **Johann.** Pianist, composer and publisher; Germany. B. 1741; d. 1799.

André, Johann Anton, son of preceding. Pianist, publisher, and theorist. B. 1775; d. 1842.

André, Johann Baptist, son of preceding. Pianist and composer. B. 1823; d. 1882.

Archer, Frederick. Organist; England. B. 1838; d. 1901.

Arditi (*ar-dee'-tee*), **Luigi.** Conductor and composer. Born, in 1822, at Crescentino, Italy. Studied the violin, etc., at Milan. Conducted Italian opera in New York, Constantinople, and in England. From 1858 resided in London.

Arenski, A. S. Composer; Russia. B. 1862; d. 1906.

Arne, Thomas Augustine (1710-78). Son of a furniture dealer in London. Educated at Eton, and intended for the law, but adopted music as a profession. Wrote about thirty operas, two oratorios, and many glees, catches, and songs. Composer of "Rule Britannia."

Artôt (*ar-to*), **Alex. I.** Violinist; Brussels. B. 1815; d. 1845.

Ascher, Joseph. Pianist. B. 1831; d. 1869.

Astorga, Emmanuele Baron d'. Composer; Sicily. B. 1681; d. 1736.

Attwood, Thomas (1765-1838). Son of a London coal merchant. A chorister of the Chapel Royal. Sent by the Prince of Wales (afterward George IV.) to study in Italy. Afterward went to Vienna, where he worked under Mozart. Returned to England in 1787. In 1795 appointed organist of St. Paul's Cathedral, and of the Chapel Royal in 1836. Compositions include church music, songs, glees, etc. A friend of Mendelssohn.

Auber (*o-behr'*), **Daniel François Esprit** (1784-1871). Born at Caen, Normandy. Studied under Cherubini. Wrote a great number of operas—"Masaniello," "Le Maçon," "Fra Diavola," "Zanetta," etc. His music is always bright and interesting; and underlying his affectation of superficial sentiment and frivolity there is concealed a technique wonderfully perfect of its kind. One of the lights of French opera.

Audran, Edmond (*o-drong*). Composer; France. B. 1842; d. 1901.

Auer (*our*), **Leopold.** Violinist; Hungary. B. 1845.

Avison, Charles. Composer; England. B. 1710; d. 1770.

B

Bach (*bakh*), **Johann Christoph Friedrich.** Organist; Germany. Son of J. S. Bach. B. 1732; d. 1795.

Bach, Johann Sebastian (1685-1750). The father of modern music. Born at Eisenach. Equally great as composer, organist, and player on the harpsichord. His works—organ sonatas, preludes and fugues, compositions for harpsichord and orchestra, passion-music, sacred cantatas, of which latter no fewer than 226 are still extant, masses, etc.—constitute the fountain-head of modern music. It is a notable fact that Bach and Händel were born in the same year.

Bach, Karl Philipp Emanuel (1714-88). Born at Weimar. Third son of Johann Sebastian Bach. Musical Director at Hamburg 1767. His compositions mark the transition from his father's style to that of Haydn and Mozart.

Bach, Wilhelm Friedemann. Organist; Germany. Son of J. S. Bach. B. 1710; d. 1784.

Bache (*bach*), **Walter** (1842-88). Pianist. Born in Birmingham. Student of Leipzig Conservatorium. Later a friend and pupil of Liszt. From 1865 lived in London.

Baillot (*bi'-yō*), **Pierre Marie** (1771-1842). A French violin virtuoso. Born at Passy. Studied in the Paris Conservatoire. The principal French violinist of his day. His études and "L'art du violon" belong to the classics of violin playing.

Balatka, Hans. Pianist and conductor; Germany. B. 1827; d. 1899.

Balfe, Michael William (1808-70). Born at Dublin. Composed a polacca at the age of seven. A year later appeared in public as a violinist. Studied in London and in Italy. Engaged by Rossini as first barytone at the Italian Opera in Paris (1828). In 1835 produced his first English opera, "The Siege of Rochelle," at Drury Lane. Opera by which he is best remembered, "The Bohemian Girl" (1843), which had a tremendous success all over the world, and is still a popular favorite. Balfe was an excellent conductor.

Bantock, Granville. Composer; England. B. 1868.

Bargiel (*bar'-geel*), **Woldemar** (1828-97). Born at Berlin. A composer of the modern German school. Wrote a symphony, three concert overtures, and a quantity of pianoforte music. From 1874 he was a professor at the Berlin Academy of Music.

Bärman (*bare'-man*), **Heinrich** (1784-1847). Born at Potsdam. Distinguished clarinet-player.

Bärman, Karl. Pianist and composer; Germany and U. S. B. 1839.

Barnard, Mrs. Charlotte Alington (1830-69). An English ballad composer. Wrote under the pen-name "Claribel."

Barnby, Sir Joseph (1838-96). Organist, composer, and conductor. Born at York. A choir-boy in the minster there, and afterward a student at the Royal Academy of Music. Held various posts as organist, or conductor, in London. Was principal of Guildhall School of Music, 1892-96.

Barnett, John (1802-90). Born at Bedford. Wrote several operas, chief among them being "The Mountain Sylph," produced at the Lyceum, London, in 1834. He also wrote a number of other compositions of various kinds, including nearly 4000 songs.

Barnett, John Francis. Composer and pianist. A nephew of John Barnett. Born in London, in 1837. His works include a number of excellent cantatas.

Barrett, William Alexander (1836-91). Born and died in London. For a number of years editor of the "Musical Times."

Bartholomey, Mrs. Ann. Organist and composer; England. B. 1811; d. 1891.

Bartlett, Homer N. Composer; U. S. A. B. 1846.

Batiste (*ba-teest'*), **Antonio Edward.** Organist and composer; France. B. 1820; d. 1876.

Beach, Mrs. H. H. A. (Amy M. Cheney). Composer; U. S. A. B. 1867.

Beethoven (*bate'-hō-fen*), **Ludwig van** (1770-1827). Born at Bonn. Distinguished himself first as a pianist. Made various concert tours (1781-96). Although a number of his youthful compositions had already been published it was not until his twenty-fifth year (1795) that Beethoven produced anything to which he appears to have thought it worth while to attach an opus number. To this year belong the three pianoforte trios known as Op. 1, and also the three pianoforte sonatas (Op. 2), dedicated to Haydn. From 1795 dates the first beginning of Beethoven's influence on musical art, an influence the extent of which it is impossible to set down in words. Of works bearing a separate opus number, Beethoven has left 138, including 9 symphonies, 7 concertos, 1 septet, 2 sextets, 3 quintets, 16 quartets, 36 pianoforte sonatas, 16 other sonatas, 8 pianoforte trios, 1 opera, 2 masses, etc.

Bellini (*bel-lee'-nee*), **Vincenzo** (1802-35). Born at Catania, Sicily. One of the lights of Italian opera. His wealth of melody, as evinced in his operas "Il Pirata," "La Sonnambula," "Norma," "I Puritani," and others, quickly raised him to the position of one of the favorite composers of his time. He died in Paris.

Benda, Georg. Composer; Bohemia. B. 1721; d. 1795.

Bendel, Franz. Pianist and composer; Bohemia. B. 1833; d. 1874.

Bendix, Otto. Composer; Copenhagen. B. 1850; d. 1904.

Benedict, Sir Julius (1804-85). Born at Stuttgart. A pupil of Hummel and Weber. From 1835 lived in London. Held various posts as conductor. Of his numerous compositions of all kinds, the opera "The Lily of Killarney" and the oratorio "St. Peter" are best known.

Bennett, Joseph. Born at Berkeley, in 1831. One of the most prominent of modern musical critics.

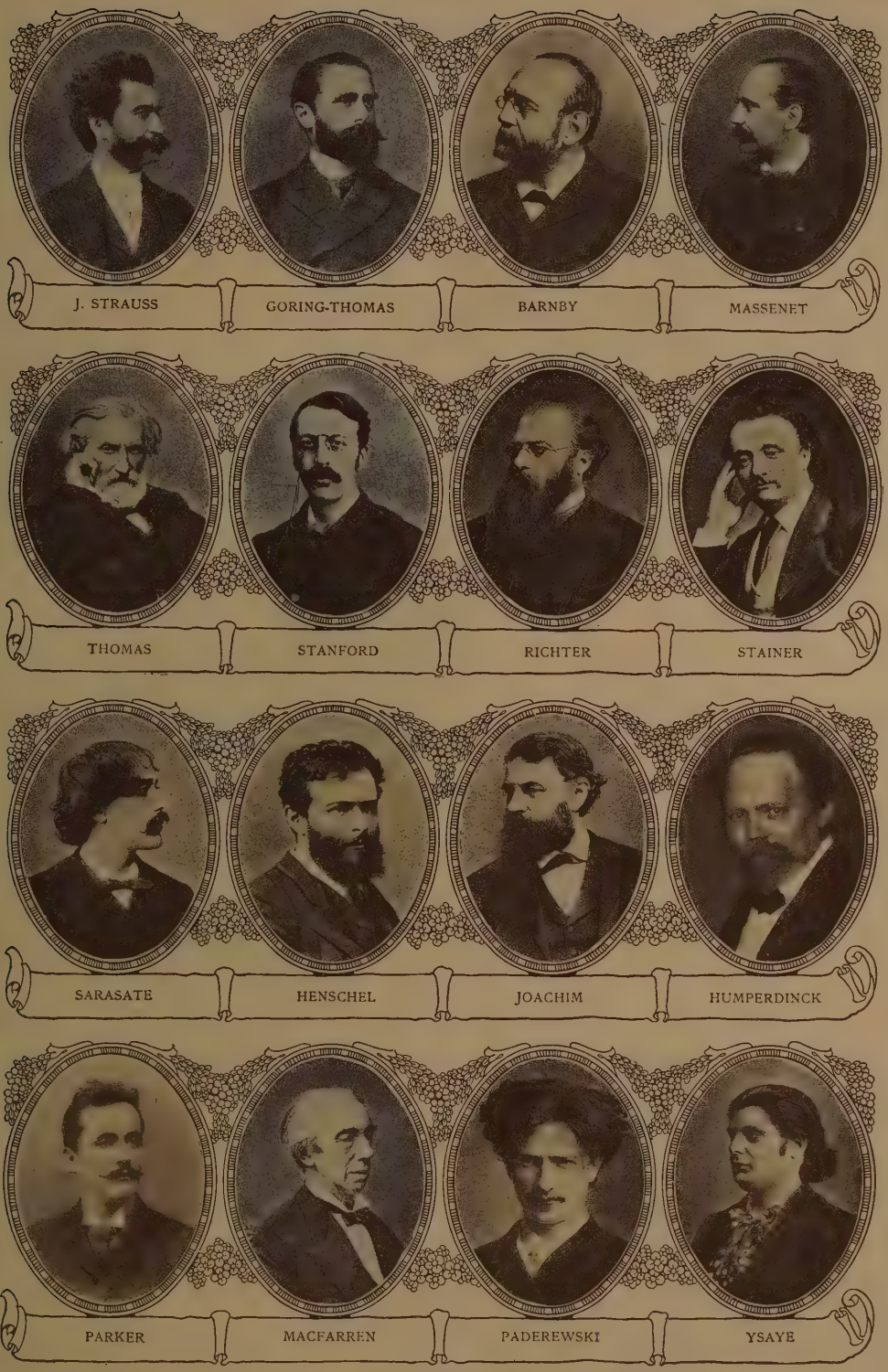
Bennett, Sir William Sterndale (1816-75). Born at Sheffield. At eight years of age became chorister at King's College Chapel, Cambridge; two years later was sent to the Royal Academy of Music, where, at the age of sixteen, 1832, he performed a pianoforte concerto of his own, and was commended by Mendelssohn, who was present. In 1856 he was appointed professor of music at Cambridge, and conductor of the Philharmonic, London; and in 1866 he became principal of the Royal Academy. Bennett was once offered the conductorship at the Gewandhaus, Leipzig. The most remarkable English composer since Purcell.

Berg, Konrad M. Pianist; Alsace. B. 1785; d. 1852.

Berger, Francesco. Pianist and composer. Born in London, in 1835.

Beringer (*ba'-ring-er*), **Oscar.** Pianist and composer. Born in 1844, at Furtwangen, Baden. Since 1872 has lived in London.

Bériot (*ba-ree-o'*), **Charles Auguste de** (1802-70). Born at Louvain. One of the great violinists of the last generation. His compositions hold an important place in the repertoire of every violinist.



DISTINGUISHED MODERN MUSICIANS

From Photographs

Berlioz (*bair-lee-os'*), **Hector** (1803-69). Born at La Côte-Saint-André, in the department of Isère, France. Intended by his father, a doctor, for the medical profession, and with this object sent to Paris in 1822. Arrived in Paris, however, Berlioz, sickened with his first experience of the medical schools, preferred to follow out his own inclinations, which lay in the direction of music. As a consequence of this determination, his family left him for some time to support himself as best he could. Becoming reconciled to his father, he was afterward given full permission to continue those musical studies which hitherto he had pursued in the face of all parental injunctions. Later, Berlioz made a number of very successful concert tours, of which he gives lively descriptions in his "Autobiography." As a composer, Berlioz belongs to the advanced Romantic school. Among his numerous compositions are the symphonies "Symphonie fantastique," "Harold," "Roméo et Juliette," the great dramatic legend "Faust," the operas "Benvenuto Cellini" and "Les Troyens"; the immense "Requiem," and a number of lesser compositions of all kinds.

Bertini (*ber-tee'-nee*), **Henri Jerome** (1798-1876). Born in London; died at Meylan. Pianist and composer. Some of his compositions are in very general use in connection with the earlier stages of pianoforte study.

Best, William Thomas (1826-97). Composer and organist. Born at Carlisle, in 1826. One of the foremost English organists of his day.

Beyer, Ferdinand. Pianist; Germany. B. 1803; d. 1863.

Biber (*bee'-ber*), **Heinrich Johann Franz von** (1638-98). Composer and violinist. Born at Wartenberg; died at Salzburg. A distinguished composer of the seventeenth century German school. Wrote some fine violin sonatas.

Billings, William. Composer; U. S. A. B. 1746; d. 1800.

Billington, Elizabeth (1768-1818). A celebrated English soprano. Born in London; died at Venice.

Bird, Arthur. Organist; U. S. A. B. 1856.

Bishop, Anna. Soprano singer; England. B. 1814; d. 1884.

Bishop, Sir Henry Rowley (1786-1855). Born in London. Gave early indication of musical talent. Produced his "Circassian Bride" in 1809. In consequence of its great success he was made conductor at Covent Garden in the following year. A long succession of highly successful dramatic compositions, overtures, and songs gradually brought him to the front as one of the most deservedly popular composers of his day. He received the freedom of the city of Dublin in 1820; was elected Reid Professor of Music in Edinburgh University in 1841; was knighted in 1842; and became professor of music at Oxford in 1848. Although he wrote much excellent music of various kinds, Bishop is now chiefly remembered for his glees and part songs.

Bishop, John (1817-90). Organist. Born at Cheltenham. He translated a number of foreign musical works into English, among others, Spohr's "Violin School" and Czerny's "School of Composition."

Bispham, David. Barytone; U. S. A. B. 1857.

Bizet (*bee-za'*), **Georges** (1838-75). Born and died in Paris. A pupil of Halévy. Wrote a number of operas—"Le docteur miracle," "Les pêcheurs des perles," "La jolie fille de Perth," "Numa," "Djamileh," and the immensely popular "Carmen."

Blagrove, Henry Gamble (1811-72). Violinist. Born at Nottingham; died in London. A magnificent orchestral leader.

Blahetka, Léopoldine (*blah-et-ka*). Pianist and composer; Austria. B. 1811; d. 1887.

Blangini, Giuseppe Marc. Mari Felice (*blan-jee-nee*). Tenor, composer, teacher; Italy. B. 1781; d. 1814.

Blauvelt, Lillian. Soprano. U. S. A. B. 1873.

Bloomfield-Zeisler, Fanny. Pianist; Austria. B. 1865.

Blow, John (1648-1708). Composer and organist. Born and died in Westminster. One of the many distinguished musicians bred in the Chapel Royal, time of Charles II.

Blumenthal (*bloo'-men-tal*), **Jacob.** Composer and pianist. Born in 1829, at Hamburg. A most prolific song-writer.

Boccherini (*bok-ke-ree'-nee*), **Luigi** (1743-1805). Born at Lucca; died at Madrid. Composer and violoncellist. Wrote a great deal of very excellent and original chamber music.

Böhm (*behm*), **Theobald.** Improved the flute. Bavaria. B. 1794; d. 1881.

Boieldieu (*bo-eld-yu'*), **François Adrien** (1775-1834). Born at Rouen. Wrote a number of successful operas—"Zoraime et Zulnare," "Le Calife de Bagdad," "Jean de Paris," "La dame blanche," and others. Boieldieu's operas are distinguished by much charming melody, and a certain naïve freshness of sentiment.

Boito (*bo-ee'-to*), **Arrigo.** Born at Padua, in 1842. Distinguished both as poet and opera composer. His best-known opera is "Mefistofele."

Bolck, Oscar. Pianist; Germany. B. 1839; d. 1888.

Bonewitz, J. H. Composer and pianist; Bavaria. B. 1839.

Bononcini or **Buononcini, Giovanni Battista** (*bo-non-chee'-nee* or *bu-o-non-chee'-nee*). Opera, Händel's rival; Italy. B. 1662; d. 1750.

Bordogni, Marco (*bor-done'-yee*). Singer and teacher; Italy. B. 1788; d. 1856.

Bottesini (*bot-te-see'-nee*), **Giovanni** (1822-89). Born at Crema, Lombardy. Studied at Milan. Made many concert tours as a virtuoso on the double bass. His command over the resources of his instrument, his clearness of intonation, expression, and execution were very wonderful. Bottesini was also a composer of merit, having written operas, symphonies, concertos, quartets, etc.

Bowman, E. M. Organist, theorist; U. S. A. B. 1848.

Boyce, William (1710-79). Born in London. Son of a cabinet-maker. Choir-boy at St. Paul's. Was made composer to the Chapel Royal in 1738. Boyce held a number of different important musical appointments in his time, and wrote a quantity of very excellent music. He is best known to musicians as the editor of "Cathedral Music," and to the public at large as the composer of "Hearts of Oak."

Braga (*brah'-ga*), **Gaetano.** Composer and violoncellist. Born at Giulianova, in 1829.

Braham, John (1774-1856). Tenor singer. Born and died in London. Equally great in opera and oratorio.

Brahms, Johannes (1833-97). Born at Hamburg. Attracted a good deal of attention as a boy by his compositions and piano-playing. Settled in Vienna in 1869. His compositions cover a wide range, and with the exception of opera there is scarcely a department of musical art in which he has not made his influence felt. Powerful, original, and versatile, Brahms ranges from the slightest to the grandest in his choice of form, and in sentiment he is just as catholic, passing from the austere grandeur of the "Requiem" or the "Song of Destiny" to the delicate charm of many of his lesser compositions, songs, etc. Brahms's predominant characteristics are great, and even daring originality, coupled, in the works of his maturity, with a rigid artistic reserve.

Bree (*bra*), **Johann Bernard van** (1801-57). Composer. Born and died at Amsterdam.

Bridge, Sir Frederick. Organist and composer. Born at Oldbury, in 1844. Organist of Westminster Abbey.

Bridge, Joseph Cox. A younger brother of the preceding, and like him, also a distinguished English musician. Born at Rochester in 1853. Organist of Chester Cathedral.

Bridgetower, George Augustus Polgreen (1780-1814). A distinguished violinist, son of an African father and a European mother. Born at Biala; died in London. Bridgetower was the first to play the "Kreutzer" sonata in public.

Bright, Dora Estella. Composer and pianist. Born at Sheffield in 1863.

Brinkerhoff, Clara M. Soprano. B. 1830.

Bristow, Frank L. Composer; U. S. A. B. 1844.

Bristow, George F. Composer; U. S. A. B. 1825.

Britton, Thomas (1651-1714). Born at Higham Ferrers; died in London. A remarkable musical enthusiast, who, from the nature of his calling, was commonly known as the "Musical Small-coal Man."

Broadwood, John. Piano-maker; England. B. 1742; d. 1812.

Bronsart, Hans von. Pianist, composer; Germany. B. 1830.

Bruch (*brookh*), **Max.** Born at Cologne, in 1838. A composer of the modern German school.

Bruckner, Anton. Organist; Austria. B. 1824; d. 1896.

Brüll (*bril*), **Ignaz.** Born at Prossnitz, in 1846; d. 1907. Wrote "The Golden Cross" and other operas, etc.

Bruneau, Alfred. Composer. Born in Paris in 1857. Has written an "Ouverture héroïque," symphonic poems—"La belle au bois dormant," "Léda," and "Penthésilée"—the operas "Kerim," "Le rêve," and "L'attaque du moulin," etc.

Bruni, Antoine Barthelemy (1759-1823). Composer and violinist. Born at Coni; died in Paris. Wrote some important educational works in connection with the violin and also the viola.

Buck, Dudley (1839-1909). Composer, organist, and pianist. Born at Hartford; died at West Orange, N. J. A prominent American musician, who studied at Leipzig, Dresden, and Paris. Was organist in various churches, and of Holy Trinity, Brooklyn, from 1877 to 1903. His works include the opera "Deseret," orchestral music, organ, church and pianoforte music, cantatas—"King Olaf's Christmas," "Voyage of Columbus," "Hymn to Music," "The Light of Asia," "The Christian Year" (a cycle of 5 cantatas)—and other compositions. He also produced a dictionary of musical terms, a work on the organ, and other writings. His cantata based on Longfellow's "Golden Legend" gained him the prize of $1,000 offered by the Cincinnati Musical Festival of 1880 for the best composition in that form.

Bullard, Fred. F. Composer; U. S. A. B. 1864; d. 1904.

Bull, John (1562-1628). Born in Somersetshire; died at Antwerp. One of the great English musicians of the Elizabethan period.

Bull, Ole Bornemann (1810-80). Born at Bergen, in Norway. Originally intended for the Church, but his great natural aptitude for the violin resulted in his deserting theology for music. Bull made many concert tours as a violin virtuoso, his somewhat sensational playing attracting great attention in Europe and America. He died in his native place.

Bülow (*bu'-lo*), **Hans Guido von** (1830-94). Pianist and composer. A pupil of Liszt. One of the great pianists of the last century. He was also an excellent conductor. In his compositions, which comprise piano pieces, songs, and orchestral works, he followed the lead of Wagner and Liszt.

Burchard, Carl. Pianist; Germany. B. 1820; d. 1896.

Burgmüller (*boorkh'-müller*), **Johann Friedrich** (1806-74). Composer. Born at Ratisbon; died at Beaulieu.

Burgmüller, Norbert (1808-36). Composer. Born at Düsseldorf. Very early showed extraordinary musical talent. He studied at Cassel under Spohr and Hauptmann; but a sickly constitution prevented his full development, and he died before reaching his promised eminence. He left much music behind him, of which two symphonies, an overture, and other pieces, notwithstanding their natural immaturity, manifest great ability. There is every reason to believe that if his life had been spared Burgmüller would have reached a high place in his art. Schumann begins a memorial notice of him by saying that since the early death of Schubert nothing more deplorable had happened than that of Burgmüller.

Burmeister, Richard. Pianist; Germany. B. 1860.

Burmester, Willy. Violinist; Germany. B. 1869.

Burney, Charles (1726-1814). Historian, organist, and composer. Born at Shrewsbury. Studied music under Arne. Was for nine years organist of Lynn Regis, in Norfolk. Afterward made several extensive tours on the Continent in search of materials for his "History of Music," the first volume of which appeared in 1776.

Busby, Thomas (1755-1838). Composer and organist. Born and died in Westminster. He wrote several works dealing with musical subjects, the most important of them being a "History of Music," based upon the larger works of Burney and Hawkins.

Busoni, Ferruccio B. Pianist; Italy. B. 1866.

Buxtehude (*boox'-te-hoo-deh*), **Dietrich** (1637-1707). Organist and composer. Born at Helsingör (*Elsinore*), Denmark; died at Lübeck.

Byrd, William (1542-1623). Composer and organist. The "Father of Musicke." Born in London. Celebrated for his church music and madrigals.

C

Caccini, Guilio (*catch-ee'-nee, ju'-lio*). Composer; Italy. B. 1558; d. 1640.

Caffarelli, Gaetano Majorano (*ca-fa-rel'-lee, gah-eh-ta'-no mah-yo-rah'-no*). Male soprano; Italy. B. 1703; d. 1783.

Calkin, James. Composer. B. 1786; d. 1862.

Calkin, J. Baptiste. Composer, organist, and pianist. Born in London, in 1827.

Callcott, John Wall (1766-1821). Composer and organist. The son of a bricklayer. Born at Kensington; died at Bristol. A great glee writer.

Callcott, William Hutchins, son of preceding. Composer. B. 1807; d. 1882.

Calvé, Emma. Soprano; France. B. 1864.

Cambert (*kang'-bair*), **Robert** (1628-77). Composer and organist. Born in Paris; died in London. The first writer of French opera.

Campagnoli (*kam-pa-nyo'-lee*), **Bartolomeo** (1751-1827). Composer and violinist. Born at Bologna; died at Neustrelitz. Wrote a "Violin School," "Studies" for viola, etc.

Campanari, Leandro. Violinist; Italy. B. 1857.

Camporese, Violante (*cam-po-reh'-seh*). Soprano; Italy. B. 1785.

Caradori, Allan Maria C. R. (*ca-ra-do'-ree*). Soprano; Italy. B. 1800; d. 1865.

Carafa (*ka-rah'-fa*), **Michele Enrico** (1787-1872). Opera composer. Born at Naples; died in Paris.

Carey, Henry (1692-1743). Composer and vocalist. Born and died in London. The first to sing "God Save the King," and reputed composer of it.

Carissimi (*ka-ris'-see-mee*), **Giacomo** (1604-74). Composer. Born and died in Rome. One of the earliest writers of oratorio.

Carl, William C. Organist; U. S. A. B. 1865.

Carreño, Teresa (*car-rehn'-yo*). Pianist; Venezuela. B. 1853.

Carrodus (*kar-ro'-dus*), **John Tiplady** (1836-95). Violinist and composer. Born at Keighley, Yorkshire; died in London. Studied under Molique in London, and afterward in Stuttgart. A great virtuoso, and a splendid orchestral leader. For many years leading violin at all the principal London concerts and the various great festivals.

Caruso, Enrico. Tenor; Italy. B. 1873.

Cary, Annie Louise. Contralto; U. S. A. B. 1842.

Catalani (*kat-a-lah'-nee*), **Angelica** (1779-1849). Born at Sinigaglia; died in Paris. One of the most brilliant sopranos known to history.

Cavalieri (*kah-val-yeh'-ree*), **Emilio del** (1550-98). The composer of the first oratorio. Born in Rome; died in Florence.

Cavalieri, Lina (*ka-val-yeh'-ree*). Operatic soprano; Italy. B. 1874.

Cellier (*sel'-yer*), **Alfred** (1844-91). Composer and organist. Wrote several very successful light operas. Born at Hackney; died in London.

Chabrier, Alexis E. Composer; France. B. 1841; d. 1894.

Chadwick, George Whitfield. Composer. Born at Lowell, in 1854. Studied under Eugene Thayer in Boston, and under Jadassohn, Reinecke, and Rheinberger in Europe. Became teacher in the New England Conservatory of Music, also its director. His works include the comic opera "Tabasco," "The Viking's Last Voyage," the lyric drama "Judith," symphonies, overtures, chamber music, choral ballads, and songs.

Chaminade (*shah-mee-nad*), **Cécile.** Composer and pianist. Has written much original and graceful chamber music. Born in Paris in 1861.

Chappell, William (1809-88). Wrote a "History of Music" extending from the earliest records to the fall of the Roman Empire; also "History of the Popular Music of the Olden Times." Born and died in London.

Charpentier, Gustave (*shar-pangt'-ya*). Composer; France. B. 1860.

Cherubini (*ka-roo-bee'-nee*), **Maria Luigi** (1760-1842). Born at Florence; died in Paris. After receiving lessons from his father, was placed under the care of the celebrated Giuseppe Sarti, whose pupil he remained for four years. When only thirteen Cherubini wrote a successful mass. His first opera, "Quinto Fabio," was produced in 1780. In 1788 he settled in Paris, where he acquired a great reputation as a composer of operas and church music. Principal among his operas, which are real works of art, are "Ifigenia in Aulide," "Lodoiska," "Medée," "Les deux journées," and "Anacreon." He also wrote four masses, a requiem, string quartets, many lesser compositions, and a masterly work on counterpoint. From 1821 to 1841 he was head of the Paris Conservatoire.

Chevé, Émile J. M. (*sheh-veh*). Inventor of simplified system of music; France. B. 1804; d. 1864.

Chickering, Jonas. Piano-maker; U. S. A. B. 1798; d. 1853

Chipp, Edmund Thomas (1823-86). Organist and composer. Born in London; died at Nice.

Chladni (*khlat'-nee*), **Ernst Florens Friedrich** (1756-1827). Born at Wittenberg; died at Breslau. Made very profound researches into the subject of acoustics.

Chopin (*sho-pang'*), **Frédéric François** (1809-49). Born near Warsaw. A student in Warsaw Conservatoire. Made his first important public appearance in Vienna in 1829, where the delicate charm and expression of his playing excited great public attention. From 1831 until his death Chopin lived in Paris. Chopin is the king of pianoforte composers. Of French and Polish parentage, he shows in his works the combined influences of the Slavonic and the French spirit. There is about them the wild, dreamy nature of the Slav, and a dainty caprice, coupled with an exquisite perfection of form and manner, thoroughly French. Some give 1810 as date of birth.

Chorley, Henry F. Critic; England. B. 1808; d. 1872.

Chrysander (*kre'-zant-er*), **Friedrich** (1826-1902). Born at Lübtheen, Mecklenburg. A distinguished writer on musical subjects. His most important work is his monumental biography of Händel. On all subjects connected with Händel or his compositions, Chrysander takes unquestioned rank as the greatest authority.

Chwatal, Franz X (*shvah'-tal*). Composer; Bohemia. B. 1808; d. 1879.

Cimarosa (*chee-ma-ro'-sa*), **Domenico** (1749-1801). Born near Naples; died in Venice. A pupil of Piccinni. Wrote an immense number of highly successful operas, which rapidly gained for him a European reputation. For three years he held a position at the court of Catharine II of Russia. He afterward went to Vienna as court conductor. In Vienna he produced his greatest work, the opera "Il Matrimonio Segreto."

Clapisson, Antonie L. (*clah-pee-song'*). Composer and pianist; Italy. B. 1808; d. 1866.

Claribel. See Barnard.

Clark, Frederick Scotson (1840-83). Composer and organist. Born and died in London.

Clarke, Hugh A. Theorist and composer; Canada. B. 1839.

Clarke, William Horatio. Organist; U. S. A. B. 1840.

Clay, Frederick Emes (1838-89). Born in Paris; died at Great Marlow. Wrote a number of light operas, "Princess Toto," etc., also many songs.

Clementi (*kla-men'-tee*), **Muzio** (1752-1832). Born in Rome. In his ninth year accepted a post as organist. At fourteen visited London, where his pianoforte playing excited general admiration. In 1817 produced his celebrated book of studies for the pianoforte, "Gradus ad Parnassum." His compositions display great lucidity of construction and elegant precision, but they show very few traces of originality. They are, however, very valuable as educational works, and it is only in this capacity that Clementi's works can be said to survive.

Cliffe, Frederick. Composer. Born in 1857, at Low Moor, Yorkshire. Has written two excellent symphonies.

Cobb, Gerard Francis. Composer. Born in 1838, at Nettlestead.

Cole, Blanche (1851-88). Soprano. Born at Portsmouth; died in London.

Coleridge-Taylor, Samuel. Anglo-African. Composer; England. B. 1875.

Colonne (*ko-lon'*), **Jules Jude,** called **Edouard.** Composer, violinist and distinguished conductor. Born at Bordeaux, in 1838.

Concone (*kon-ko'-ne*), **Giuseppe** (1810-61). Composer and organist. Born and died at Turin. Remembered principally for his educational works, in connection with singing.

Conried, Heinrich. Impresario; Germany. B. 1855; d. 1909.

Converse, C. C. Composer; U. S. A. B. 1832.

Converse, Frederick Shepherd. Composer; U. S. A. B. 1871.

Cooke, Benjamin (1734-93). Composer and organist. A celebrated glee writer. Born and died in London.

Cooke, Henry. Composer and vocalist. "Master of the Children" in the Chapel Royal, time of Charles II. Originally a musician, but served in the Royalist forces during the civil war, obtaining a captain's commission in 1642, for which reason he was commonly known as Captain Cooke after he returned to his first calling. Born in Westminster (year uncertain), where he died in 1672.

Coote, Charles (1809-80). Composer of an immense amount of popular dance music ("Coote and Tinney"). Born and died in London.

Corder, Frederick. A distinguished English composer. Born in London, in 1852.

Corelli (*ko-rel'-lee*), **Arcangelo** (1653-1713). The father of modern violin playing. Born at Fusignano. About 1672 visited Paris, but returned shortly afterward to Rome. 1680-85, traveled in Germany, where his musical acquirements gained for him the favor of many princes and nobles, in particular that of the Elector of Bavaria, in whose service he remained for some time. Corelli wrote a quantity of chamber music, his works for the violin being of great excellence.

Corri, Domenico (1746-1825). Composer and vocalist. Born in Rome; died at Hampstead.

Costa, Sir Michael (1810-84). Composer and conductor. Born at Naples. Went to England in 1829. From 1830 to 1846 was conductor at the King's Theater, London, where he established a high reputation. In 1846 he was appointed conductor of the Philharmonic Society and the Italian Opera. Of his compositions, the oratorios, "Naaman" and "Eli," are the most familiar to the present generation.

Couperin (*koo-pu-rang*), **Armand Louis.** Organist. B. 1600; d. 1665.

Couperin, François (1668-1733). Composer, organist, and clavecinist. Born and died in Paris. As a composer of exquisitely constructed little pieces for the clavecin, or harpsichord, he may be reckoned one of the early fathers of modern pianoforte music.

Coussemaker (*koos-ma-kare'*), **Charles Edmond Henri de** (1805-76). A French magistrate, writer, and composer. Born at Bailleul; died at Lille. An authority on the music and musicians of the Middle Ages.

Cowen, Frederic Hymen. Composer and pianist. Born in 1852 at Kingston, Jamaica. An infant prodigy: composed a waltz at six years of age, and when eight wrote an operetta, entitled "Garibaldi." Until 1865 a pupil of Benedict and Goss. Thereafter went to Leipzig, where he studied under Hauptmann, Moscheles, and Reinecke. Has written operas; two oratorios, "The Deluge" and "Ruth"; cantatas, "The Rose Maiden," "The Sleeping Beauty," "The Corsair," etc.; symphonies, chamber music, and songs.

Cramer, Johann Baptist (1771-1858). Composer and pianist. Born at Mannheim; died in London. A brilliant pianist, and a composer of much excellent music. Famous for his well-known pianoforte études.

Crescentini, Girolamo (*creshen-tee'-nee*). Male soprano and composer; Italy. B. 1766; d. 1846.

Creser, William. Composer and organist. Born at York, in 1844.

Cristofori, Bartolomeo di F. (*cris-to'-fo-ree*). Inventor of the piano; Italy. B. 1651; d. 1731.

Crivelli, Domenico (*cree-vel-lee*). Teacher of singing; Italy. B. 1794; d. 1856.

Croft, William (1678-1727). Born at Nether Eatington, Warwickshire. A pupil of Blow at the Chapel Royal. Was the organist of Westminster Abbey and of the Chapel Royal. Wrote anthems, sonatas, songs, hymn-tunes, etc. Died at Bath.

Cross, Michael H. Composer, organist; U. S. A. B. 1833; d. 1897.

Crotch, William (1775-1847). Born at Norwich; died at Taunton. The son of a carpenter of musical tastes. Displayed a strong leaning toward music from his earliest years, and when only fifteen was appointed organist of Christ Church, Oxford. In 1820 he was made lecturer on music at the Royal Institution, London, and in 1822 was appointed principal of the Royal Academy of Music, founded in that year. He wrote several oratorios—"Palestine," "The Captivity of Judah," etc.—anthems, glees, organ and pianoforte pieces. Crotch enjoyed a great reputation as a teacher.

Crouch, Frederick William Nicholls (1808-96). Composer and cellist. Born in London. Came to the United States in 1849. Served in the Confederate Army, and afterward taught music. He wrote popular songs, the best-known of which is "Kathleen Mavourneen." He died at Portland, Maine.

Cui (*kwee*), **César Antonovitch.** Composer and writer. Born in 1835, at Vilna, Russia. A prominent composer of the Slavonic school.

Cummings, William Hayman. Composer, organist, tenor vocalist, and writer. Born in 1835, at Sidbury, Devonshire. Has written a cantata, Church music, etc.; is the author of the "Life of Purcell" in the series of "Great Musicians," and has also written "Rudiments of Music," and "A Biographical Dictionary of Musicians," in Messrs. Novello's series of "Music Primers."

Curschmann, Karl F. (*koorsch'-man*). Composer; Germany. B. 1805; d. 1841.

Curwen, John (1816-80). Born at Heckmondwike, Yorkshire; died at Manchester. Educated for the Independent ministry. He was led to study singing in connection with church and Sunday-school work. Using the system introduced by Sarah Ann Glover as a basis, he gradually evolved the method of notation known as the tonic sol-fa. In 1864 he resigned his pastoral charge and devoted himself wholly to the expansion of the tonic sol-fa movement.

Cusins, Sir William George. Born in London in 1833; died in 1893. A choir-boy at the Chapel Royal. A pupil of Fétis, at Brussels, and also of Potter, Bennett, Lucas, and Sainton, at the Royal Academy of Music. King's scholar at the Academy in 1847. Organist of the Queen's Private Chapel; master of the music to the Queen; conductor of the Philharmonic, etc. Wrote an oratorio, "Gideon"; a pianoforte concerto, overtures, and other works. He was an excellent pianist.

Cuzzoni, Francesca (*coot-zo'-nee*). Soprano; Italy. B. 1700; d. 1770.

Czerny, Karl (*chur'-neh*). Composer and pianist; Austria. B. 1791; d. 1857.

D

Dalayrac, Nicholas (*dah-leh-rak'*). France. B. 1753; d. 1809.

D'Albert. See ALBERT.

Damoreau, Laure Cinthie (*dah-mo-ro'*), known as **Cinti-Damoreau** (*chin'-tee*). Singer. B. 1801; d. 1863.

Damrosch, Frank. Born at Breslau, in 1859. Son of Leopold Damrosch. Conductor and organizer of various musical societies in New York, where he has also rendered good service as Supervisor of Music in the public schools.

Damrosch, Leopold (1832-85). Composer and violinist. Born at Posen; died in New York. Figured prominently in America as a conductor. Founded the Oratorio and Symphony societies, and established German opera in New York. Wrote a violin concerto; a festival overture; "Ruth and Naomi, a Sacred Idyl"; songs, etc.

Damrosch, Walter Johannes. Born at Breslau in 1862. Son of Leopold Damrosch. Composer, conductor, and musical organizer in New York. He has produced an opera, "The Scarlet Letter," "Manila Te Deum," and other works.

Dancla, Jean Baptiste Charles. Composer and violinist. Born at Bagnères-de-Bigorre, in 1818.

Dannreuther (*dan'roi-ter*), **Edward.** Writer and pianist. Born at Strasburg, in 1844. A distinguished advocate of the advanced school of musical art, being in a special degree a champion of Wagner. Died, London, 1905.

David (*dah-veed'*), **Félicien César** (1810-76). Composer. Born at Cadenet; died at St.-Germain-en-Laye. Traveled extensively in the East. His principal work is the remarkable symphonic ode, "Le désert," which, in 1844, after various previous unsuccessful productions, made him one of the musical celebrities of the last century.

David (*da-feet'*), **Ferdinand** (1810-73). Composer and violinist. Born at Hamburg; died at Klosters. A pupil of Spohr. In 1836 was appointed leader at the Gewandhaus, Leipzig. Wrote concertos, caprices, études, variations, etc., for the violin.

Davidoff (*da-vee-dof*), **Karl** (1838-89). Composer and cellist. Born at Goldingen, Russia; died in Moscow. Studied the violoncello both in Moscow and in St. Petersburg, and was afterward a pupil of Hauptmann at Leipzig, for composition. In 1860 was appointed professor of the violoncello at Leipzig Conservatory. Returning to St. Petersburg, he became solo cellist in the imperial orchestra, and teacher in, and eventually director of, the Conservatory. Wrote a large number of violoncello solos and concertos, and also some fine chamber music.

Davies, Fanny. Pianist. Born in Guernsey, in 1861. Has had a successful career in England and on the Continent.

Davison, James William (1813-85). Composer and writer. Born in London; died at Margate.

Day, Alfred. Theorist; England. B. 1810; d. 1849.

Dayas, W. Humphries (*di'-as*). Organist; U. S. A. B. 1864.

Debussy, Achille Claude. Composer; France. B. 1862.

De Koven (Henry Louis), Reginald. Composer. Born at Middletown, Conn., in 1859. He was taken to Europe at eleven and there educated. Graduated from St. John's College, Oxford, in 1879. Studied music under a number of eminent teachers. In 1882 came to Chicago, and later lived in New York, Washington, D. C., and New York again. His light operas, "Robin Hood," "The Highwayman," "The Three Dragoons," etc., display much skill in melody, harmony and instrumental coloring. His other works include the grand opera "Trilby," numerous songs, and incidental pieces, and musical criticism.

Delibes (*du-leeb'*), **Clément Philibert Léo** (1836-91). Born at St.-Germain du Val; died in Paris. Entered the Paris Conservatoire in 1848. A pupil of Adam. Wrote some exquisite ballet music—"Coppélia," "Sylvia," etc.—and also several operas.

Demunck, Ernst. Cellist and composer. Born at Brussels, in 1840. Lived in London, Paris, and Weimar. Married Carlotta Patti.

Denza (*den'-tsa*), **Luigi.** Composer. Born at Naples, in 1846. Best known as a song-writer. Composed the opera "Wallenstein."

Deppe (*dep'-pe*), **Ludwig** (1828-90). Pianist. Born at Hamburg; died at Pyrmont. Celebrated as a teacher.

De Reszke (*resh'-keh*), **Edouard.** Basso. Born at Warsaw. in 1856. Pupil of his brother and other teachers. Made his début in Paris, 1876, as the King in "Aïda." Later sang in Italy, London, and America. He ranks among great dramatic bassos, excelling equally as singer and actor.

De Reszke, Jean. Tenor singer. Born at Warsaw, in 1853. At twelve he sang in the cathedral at Warsaw, arousing public interest by the striking qualities of his voice. He entered the legal profession, but abandoned it to study for the stage. Under the name of De Reschi, he made his début at Venice, 1874, as Alfonso in "La Favorita." After temporary retirement for perfecting his voice for tenor rôles, he reappeared before the public, and in various parts, sung in Europe and America, won reputation as perhaps the greatest dramatic tenor of his time.

Deswert (*da-vehr'*), **Jules** (1843-91). Composer and cellist. Born at Louvain; died at Ostend.

Devrient, Ed. P. (*deh-vree-ong*). Basso; Germany. B. 1801; d. 1877.

Dewar, James (1793-1846). Composer, organist, and violinist. Born and died in Edinburgh.

Diabelli, Anton (*dee-a-bel'-lee*). Composer; Germany. B. 1781; d. 1858.

Dibdin, Charles (1745-1814). Composer, vocalist, dramatist, and song-writer. Born at Southampton. At fifteen he was engaged as singing actor at Covent Garden Theater. In the course of many ventures, he produced a number of very popular plays interspersed with music, such as "The Padlock," "The Waterman," "The Quaker," etc. In 1789 Dibdin commenced his celebrated, and at that time novel "entertainments." His fame, however, rests upon his sea-songs, lyrics which gained for him the title of the "Tyrtæus of the British Navy." As a recognition of the national importance of these songs, many of which were first heard in connection with his different plays and entertainments, the government, in 1802, bestowed upon him a pension of £200 a year.

Dippel, Andreas. Tenor; Germany. B. 1866.

Ditters (Ditters von Dittersdorf), Karl (1739-99). Composer and violinist. Born in Vienna; died near Neuhaus, Bohemia. Wrote comic operas, the best of them being "Doktor und Apotheker." Also composed Church music, symphonies, quartets, sonatas, songs, etc., and left an autobiography.

Donizetti (*do-nee-tset'-tee*), **Gaetano** (1797-1848). Born at Bergamo. One of the bright stars of the Rossinian school of Italian opera. Wrote about twenty operas before he met with anything like real success. "Anna Bolena," "Lucia di Lammermoor," and "Belisario," brought him into the front rank of composers, and thereafter he turned out successful operas with marvelous ease and rapidity. His operas are

distinguished by a wealth of fascinating melody and a ready appreciation of the picturesque. Of the seventy operas which he wrote "Don Pasquale," "L'Elisir d'Amore," "La fille du régiment," and "Lucrezia Borgia," may be instanced as freshest and most original in conception and execution.

Donzelli, Domenico (*dond-sel'-lee*). Tenor; Italy. B. 1790; d. 1873.

Dorn, Heinrich (1804-92). Composer, conductor, teacher, and critic. Born at Königsberg; died at Berlin.

Dowland, John (1562-1626). Composer and lute-player. Born and died at Westminster. A celebrated madrigal writer.

Dragonetti, Domenico (1763-1846). A distinguished virtuoso on the double bass. Born at Venice; died in London.

Drechsler (*drekhs'-ler*), **Karl** (1800-73). Cellist. Born at Kamenz; died at Dessau.

Dresel, Otto (*dreh'-zel*). Pianist; Germany. B. 1826; d. 1890.

Dreyschock, Alex. (*dry'-shock*). Pianist; Germany. B. 1818; d. 1869.

Dulcken, Ferdinand Q. (*dool'-ken*). Composer, pianist; Germany. B. 1837; d. 1902.

Dulcken, Marie Louise. Pianist; Germany. B. 1811; d. 1850.

Dunstable, John (of). Composer; England. B. 1380(?); d. 1453.

D'Urfey, Thomas (1649-1723). Writer and vocalist. Born at Exeter; died at Westminster. Wrote some thirty plays, but principally famous as a writer of convivial songs, notably the collection entitled "Pills to Purge Melancholy."

Dussek (*doo'-shek*), **Franz.** Composer; Hungary. B. 1736; d. 1799.

Dussek, Johann Ladislaus (1761-1812). Pianist and composer. Born at Czaslau, Bohemia; died at St.-Germain-en-Laye. Held in high estimation as a pianist both in Paris and in London. Wrote twelve concertos, quintets, quartets, trios, sonatas, etc.

Dussek, Sophia, wife of last. Pianist, singer, harpist; Scotland. B. 1775; d. 18—.

Duvernoy, Jean B. (*doo-vern-wah'*). Pianist, teacher; France. B. 1802; d. 1880.

Dvořák (*dvor'-zhak*), **Antonin.** Born at Mülhausen, Bohemia, in 1841. Educated in the organ school at Prague. One of the most gifted composers of the modern German school. Has written symphonies, cantatas, some sacred compositions, chamber music, etc., all of a strongly marked national character. His "Spectre's Bride," the remarkable "New World" symphony, and the pianoforte quintet (Op. 81), are exceptionally fine works, and illustrate only a few phases of a musical individuality, every manifestation of which is excellent. Died, Prague, 1904.

Dwight, J. S. Critic; U. S. A. B. 1813; d. 1893.

Dykes, John Bacchus (1823-1876). Born at Hull; died at St. Leonards. A celebrated writer of hymn-tunes.

E

Eberl, Anton (*eh'-berl*). Composer and pianist; Austria. B. 1766; d. 1817.

Eddy, Hiram Clarence. Organist; U. S. A. B. 1851.

Edwards, Julian. Composer; England. B. 1855. d. 1910.

Eichberg, Julius. Composer; Germany. B. 1824; d. 1893.

Elgar, Sir Edward William. Composer; England. B. 1857.

Ella, John (1802-88). Violinist and writer. Born at Thirsk; died in London. In 1845, instituted the series of chamber concerts known as the "Musical Union." In connection with them he prepared "analytical programmes," an example which has since been largely followed in England.

Ellicott, Rosalind Frances. Composer. Born at Cambridge in 1857. Has written some excellent compositions for orchestra.

Elson, Louis C. Critic and historian; U. S. A. B. 1848.

Elvey, Sir George Job (1816-94). Born at Canterbury. A choir-boy in the cathedral there. In 1835 appointed organist of St. George's, Windsor. Knighted in 1871. Retired from St. George's in 1882. Wrote principally church music.

Elvey, Stephen, brother of preceding. Organist; England. B. 1805; d. 1860.

Emery, Stephen A. Theorist; U. S. A. B. 1841; d. 1891.

Engel, Karl (1818-82). Eminent writer on music and musical instruments. Born at Hanover; died in London.

Epstein, Abraham, b. 1855; **Epstein, Marcus,** b. 1857, brothers. Four-hand pianists; U. S. A.

Erard, Sebastian. Piano-maker; Paris. B. 1752; d. 1831.

Ernst, Heinrich Wilhelm (1814-65). Violinist and composer. Born at Brünn; died at Nice. Studied at the Vienna Conservatory; afterward a pupil of De Beriot. Traveled all over Europe, achieving great success wherever he appeared. As a composer is most widely known by the celebrated "Élégie."

Essipoff, Annette. Pianist. Born in St. Petersburg, in 1851. A virtuoso of immense technical resources. In 1876 she toured America with great success.

F

Faelten, Karl. Pianist; Germany. B. 1846.

Farinelli, Carlo B. (*fah-ree-nel'-lee*). Male soprano; Italy. B. 1705; d. 1782.

Fauré (*fo-ra'*), **Gabriel Urbain.** Organist and composer. Born at Pamiers in 1845. Professor at the Paris Conservatoire. Excels especially in vocal and chamber music, but has composed well in all forms.

Faure (*fore*), **Jean Baptiste.** Barytone and composer. Born at Moulins, in 1830. After a brilliant success in opera he became professor at the Paris Conservatoire. He composed many sacred songs, including "Palm Branches."

Favarger, René (1815-68). Composer and pianist. Born and died at Étretat.

Fayrfax, Robert (1460-1529). Composer and organist. Born at Bayford; died at St. Albans.

Fesca, Alexander Ernst (1820-49). Composer and violinist. Born at Carlsruhe; died at Brunswick.

Fétis (*fa-tees'*), **François Joseph** (1784-1871). Composer, organist, and writer. Born at Mons, Belgium. Studied in Paris. In 1818 appointed professor at the Conservatoire. In 1827 started the "Revue musicale." Wrote many theoretical works, and also the great "Biographie universelle

des musiciens et bibliographie générale de la musique." He died in Brussels, where for years he had been royal conductor and director of the Conservatoire.

Field, John (1782-1837). Composer and pianist. Born in Dublin. A pupil of Clementi. Spent the greater part of his life in Russia, where he enjoyed a great reputation as performer and teacher. In his compositions, particularly in his dreamy and graceful nocturnes, Field may be considered the forerunner of Chopin.

Fielitz, Alex. von. Composer; Germany. B. 1860.

Fillmore, J. C. Pianist and essayist; U. S. A. B. 1843; d. 1898.

Finck, Henry T. Critic and essayist. Born at Bethel, Mo., in 1854. Graduated at Harvard in 1876. Studied music with J. K. Paine. Attended the first Bayreuth Festival, in 1876, and became an earnest advocate of Wagner. In 1881 he was made musical editor of the New York "Evening Post." His writings include "Wagner and His works," "Paderewski and His Art," "Edvard Grieg," etc.

Fioravanti, V. (*fee-o-rah-van'-tee*). Composer; Italy. B. 1770; d. 1837.

Fiorillo (*fee-o-ril'-lo*), **Federigo.** Composer and violinist. Born at Brunswick, probably in 1753. Wrote some very fine études for the violin.

Fischer, Karl August (1828-92). Composer and organist. Born at Ebersdorf; died in Dresden.

Flagler, Isaac van Vleck. Organist and composer; U. S. A. B. 1854; d. 1909.

Flotow, Friederich von (1812-83). Composer of operas. Born at Teutendorf, Mecklenburg; died at Darmstadt. Wrote "Alessandro Stradella" and "Martha," the latter opera being that by which he is most widely known.

Foerster (*fer'-shter*), **Adolph M.** Composer. U. S. A. B. 1854.

Foley ("Signor Foli"), Allan James (1842-99). Bass vocalist. Born at Cahir, Tipperary; died at Southport.

Foote, Arthur. Composer; U. S. A. B. 1853.

Forkel, Johann N. Organist; Germany. B. 1749; d. 1818.

Formes (*for'-mes*), **Karl Joseph** (1816-89). Bass vocalist. Born at Mülheim-on-the-Rhine; died in San Francisco.

Foster, Stephen Collins (1826-64). Song composer. Born at Laurenceville, Pa.; died in New York. Wrote words and music of many popular songs, among which may be mentioned "Old Uncle Ned," "My Old Kentucky Home," "Old Folks at Home," and "Massa's in the Cold, Cold Ground."

Franck (*frahnk*), **César Auguste** (1822-90). Composer, organist, and pianist. Born at Liège; died at Paris. Wrote a number of excellent sacred compositions—"Ruth," "Rédemption," "Les béatitudes," etc.

Franz (*frahnts*), **Robert** (1815-92). Composer and organist. Born and died at Halle. A song-writer of great talent.

Frescobaldi (*fres-ko-bal'dee*), **Girolamo** (1583-1644). Composer and organist. Born at Ferrara; died in Rome. Organist of St. Peter's at Rome.

Froberger, J. J. (*fro'-behr-gehr*). Organist; Germany. B. 1615; d. 1667.

Fry, Wm. H. Composer; U. S. A. B. 1815; d. 1854.

Fumagalli, Adolfo (*foo-mah-gal'-lee*). Pianist and composer; Italy. B. 1828; d. 1856.

Fux, J. J. (*fooks*). Theorist. B. 1660; d. 1741.

G

Gabrieli (*gah-bree-eh'-lee*), **Andrea** (1510-86). Composer and organist. Born and died in Venice.

Gabrieli, Giovanni (1557-1612). Composer and organist. Nephew of Andrea. Born and died in Venice.

Gade (*gah'de*), **Niels Wilhelm** (1817-90). Composer. Born and died in Copenhagen. Wrote symphonies, overtures, an opera, choral works, chamber music, etc. His compositions lean toward the style of Mendelssohn. His music displays a strongly marked Scandinavian character and he was a notable master of instrumentation.

Gadsby, H. R. Composer; England. B. 1842.

Gadski, Johanna. Soprano; Germany. B. 1871.

Galelei, Vincenzo (*gah-lee-leh'-ee, vin-chent'-zo*). Essayist and composer; Italy. B. 1535; d. 16—.

Galin, Pierre (*gah-long*). Inventor of numerical notation; France. B. 1786; d. 1821.

Galluppi, Baldessaro (*gah-loop'-pee*). Composer; Italy. B. 1706; d. 1785.

Gänsbacher, J. B. (*gehns'-bach-er*). Composer; Germany. B. 1778; d. 1844.

Ganz, Wilhelm. Composer, pianist, conductor, and professor. Born at Mayence, in 1833.

Garcia, Manuel. Vocalist and teacher. Born in Madrid, in 1805. For many years resided in London as a teacher of singing. He invented the laryngoscope.

Garcia, Manuel del Popolo Vincente (1775-1832). Famous tenor, composer, and teacher of singing. Born in Seville; died in Paris.

Gaul, Alfred Robert. Composer and organist. Born at Norwich, in 1837. Well known as the writer of "The Holy City."

Gaviniés (*ga-veen-yes*), **Pierre** (1726-1800). Composer and violinist. Born at Bordeaux; died in Paris. Self-taught. Wrote a number of compositions for the violin, of great technical difficulty, but extremely valuable to advanced students.

Gelinek, Joseph (*geh'-lee-nek*). Composer. Austria. B. 1758; d. 1825.

Geminiani (*jem'-ee-nee-ah'-nee*), **Francesco** (1680-1762). Composer and violinist. Born at Lucca; died in Dublin. One of the great Italian violin virtuosi of the eighteenth century. Lived in London for many years.

Genée, R. (*zheh-neh*). Composer; Dantzig. B. 1824; d. 1896.

Gérardy (*zha-rar-dee*), **Jean.** Born at Lüttich, in 1878. A remarkable cellist. Has made many concert tours, everywhere exciting great admiration by his wonderful tone and execution.

Gericke (*geh'-ri-ke*), **Wilhelm.** Orchestral conductor and composer. Born at Gratz, in 1845. For years he led the Boston Symphony Orchestra, which under him reached the front rank among such organizations.

Gerke, Anton (*gur-keh*). Teacher; Germany. B. 1814; d. 1870.

German, J. Edward. Composer. Born at Whitechurch, in 1862. Has written a number of extremely effective orchestral and choral compositions.

Gernsheim (*gerns'-hime*), **Friedrich.** Composer and pianist. Born at Worms, in 1839. Long director of the Rotterdam

Conservatory, and later of the Stern Conservatory in Berlin. Has written a pianoforte concerto, several quartets, the cantata "Salamis," etc.

Gerster, Etelka (*gehrs'-ter*). Soprano; Hungary. B. 1855.

Gevaërt, François A. (*geh-vehrt*). Organ writer; Netherlands. B. 1828; d. 1908.

Gibbons, Christopher. Organist. B. 1615; d. 1676.

Gibbons, Orlando (1583-1625). Composer and organist. Born at Cambridge; died at Canterbury. In 1604 appointed organist of the Chapel Royal, and in 1623 organist of Westminster Abbey. A notable madrigal writer, but even more celebrated as a composer of Church music.

Gilchrist, William Wallace. Composer. Born in Jersey City, in 1846. Pupil of Hugh A. Clarke at the University of Pennsylvania. Organist, choirmaster, teacher, and conductor of large experience. In 1882 he won the Cincinnati Festival prize with his "Psalm XLVI." Among his other compositions are the "Song of Thanksgiving," for chorus and orchestra, a cantata, "The Rose," "Ode to the Sun," etc.

Gilmore, P. F. Conductor; Ireland. B. 1829; d. 1890.

Giordani, Tomaso (*jee-or-dah'-nee*). Composer and singing-teacher; Italy. B. 1744; d. 18—.

Giuglini, A. (*jeul-ee'-nee*). Tenor; Italy. B. 1826; d. 1865.

Gladstone, F. E. Organist and composer; England. B. 1845; d. 1892.

Glareanus, H. (*glah-reh-ah'-nus*). Theorist; Germany. B. 1488; d. 1563.

Glazounow (*glah'-tsoo-nof*), **Alexander.** Composer; Russia. B. 1865.

Gleason, F. Grant. Composer; U. S. A. B. 1848.

Glimes, J. B. J. de (*gleem*). Pianist; Brussels. B. 1814; d. 1881.

Glinka, Mikhail Ivanovitch (1804-57). Composer and pianist. Born at Novospaskoi, near Smolensk. He is *par excellence* Russia's most national composer. His most successful work was the opera "La vie pour le Czar," produced in 1836. Outside of Russia, Glinka is perhaps best known by his two concert compositions, "La Jota Aragonese," and "Kamarinskaja."

Glover, C. W. Composer of songs; England. B. 1806; d. 1863.

Glover, Sarah Ann (1785-1867). Born at Norwich, England; died at Malvern. Founder of the tonic sol-fa system.

Glover, Stephen. Composer of songs. England. B. 1812; d. 1870.

Glover, William H. Violinist, composer, and critic; England. B. 1819; d. 1875.

Gluck (*glook*), **Christoph Willibald** (1714-87). Composer. Born at Weidenwang, near Neumarkt, in the Upper Palatinate; died in Vienna. Studied music in Prague, Vienna, and Milan. Wrote some very successful operas in the conventional Italian style of the period. With the composition of "Orfeo ed Eurydice" (1762) entered upon his career as a reformer of opera, which constitutes an important chapter in the history of musical development. Gluck triumphed in a memorable combat with Piccinni.

Godard (*go-dar*), **Benjamin** (1849-95). Composer and violinist. Born in Paris; died at Cannes. Wrote operas—"Pedro de Zalaméa," "Jocelyn," and "Dante"—"Concerto Romantique," for violin; "Symphonie legendaire," chamber music, songs, etc.

Goddard, Arabella. Pianist. Born at Saint-Servan, in 1836.

Godefroid, Félix (*gode'-froa*). Composer and harpist; France. B. 1818; d. 1897.

Godfrey, Adolphus Frederick (1837-82). Composer and bandmaster. Born and died in Westminster.

Godfrey, Charles (1790-1863). Composer and bandmaster. Born at Kingston; died in London.

Godfrey, Charles. Composer and bandmaster. Born in London, in 1839.

Godfrey, Daniel. Composer and bandmaster. Born in London, in 1831.

Godowski (*go-dof'-shkee*), **Leopold.** Pianist and composer; B. 1870.

Goetz (*gets*), **Hermann** (1840-76). Composer. Born at Königsburg; died near Zurich. Wrote an opera on the subject of "The Taming of the Shrew," a symphony, etc.

Goldbeck, Robert. Composer and pianist; Germany. B. 1835; d. 1908.

Goldmark, Karl. Composer; Germany. B. 1832.

Goldschmidt, Otto. Conductor and composer, husband of Jenny Lind; Germany. B. 1829.

Gollmick, Adolf. Composer and pianist; Germany. B. 1825; d. 1883.

Goltermann, G. E. Violoncellist; Germany. B. 1824; d. 1898.

Goovaerts, A. I. M. A. (*goo'-vehrts*). Composer; Netherlands. B. 1847.

Goria, A. E. (*go'-ree-ah*). Pianist; France. B. 1823; d. 1860.

Goss, Sir John (1800-80). Composer and organist. Born at Fareham, Hampshire; died in London. Educated in Chapel Royal. In 1838 appointed organist at St. Paul's Cathedral. Knighted in 1872. A prominent composer of Church music. Wrote a valuable "Introduction to Harmony."

Gossec, François Joseph (1733-1829). Composer. Born at Vergnies, in Hainaut; died at Passy. Wrote many operas, symphonies, and lesser compositions, of repute in their day. During the Directory, Gossec received the official title, "First Composer of France."

Gottschalk, L. M. Pianist; U. S. A. B. 1829; d. 1869.

Goudimel, Claude (*goo'-dee-mel*). Composer; France; B. 1510; d. 1572.

Gounod (*goo-no'*), **Charles François** (1818-93). Composer and organist. Born and died in Paris. Studied at the Paris Conservatoire, where he obtained the first prize for composition. Spent some time in Rome, Vienna, and in England. Up to 1859 had composed many excellent works—"Sapho," "Ulysse," "La nonne sanglante," "Messe de Ste. Cecile," "Le médecin malgré lui," etc. In 1859 "Faust" was performed for the first time, and met with a tremendous success. "Faust" established Gounod's reputation, and was followed by "La Colombe," "La reine de Saba," "Mireille," "Roméo et Juliette," "Cinq Mars," "Polyeucte," "Le Tribut de Zamora"; the sacred compositions, "La rédemption," and "Mors et vita"; besides many lesser works, songs, etc. "Faust," however, overshadows them all, although, from a musician's point of view, "Roméo et Juliette" is almost finer than that popular masterpiece.

Gouvy, Theo. (*goo'-vee*). Composer; France. B. 1819; d. 1898.

Gow, Niel (1727-1807). Composer and violinist. Born at Strathband; died at Inver.

Graham, George Farquhar (1789-1867). Composer and writer. Born and died in Edinburgh. An authority on everything relating to Scotch music.

Grau, Maurice. Impresario; Austria. B. 1849; d. 1906.

Graun, J. G. Composer; Germany. B. 1698; d. 1771.

Graun, Karl Heinrich (1701-59). Composer. Born at Wahrenbrüch, Saxony. Wrote some fifty cantatas, and about thirty operas. His principal work is his Passion music "Der Tod Jesu," which is still sometimes performed.

Greatorex, Th. Organist and composer; England. B. 1758; d. 1831.

Greene, Maurice (1695-1755). Composer and organist. Born and died in London. Wrote Church music. Projected the great "Cathedral Music" afterward completed by Boyce.

Grétry (*gra-tree'*), **André Ernest Modeste** (1741-1813). Composer. Born at Liège; died at Montmorency. A prolific and once celebrated writer of French operas and other works.

Grieg (*greeg*), **Edvard Hagerup** (1843-1907). Composer and pianist. Born and died at Bergen. Studied at Leipzic Conservatory. In Copenhagen came under the influence of Gade. Wrote a pianoforte concerto, orchestral works, songs, chamber-music, etc., all with a pronounced Norwegian character. His "Peer Gynt" suites are perhaps the most widely known of his larger works.

Griepenkerl, F. C. (*gree'-pen-kerl*). Theorist; Germany. B. 1782; d. 1849.

Grisi (*gree'zee*), **Giulia** (1812-1869). Soprano vocalist. Born at Milan; died in Berlin. Attained a remarkable success in opera, through her magnificent voice and great beauty. Was for fifteen years prima donna in Paris and London.

Grove, Sir George (1820-1900). Writer. Born at Clapham; died in London. Originally a civil engineer. For many years connected with the Crystal Palace, and in connection with the concerts there wrote a long series of analytical programmes. In 1883 he was appointed first principal of the Royal College of Music, and upon its inauguration received the honor of knighthood. As editor of the "Dictionary of Music and Musicians" he rendered a lasting service to the cause of musical art.

Grützmacher, F. (*greetz'-macher*). Cellist; Germany. B. 1832.

Guarnerius, A. (*gwar-neh'-ree-us*). Violin-maker; Italy. B. 1683; d. 1745.

Guglielmi, P. (*gool-yel'-mee*). Composer; Italy. B. 1727; d. 1804.

Guido, d'Arezzo (*goo-ee'-do dar-ret'-so*). Theorist; Italy. B. 995 (?); d. 1050 (?).

Guilmant (*geel-mong*), **Félix Alexandre.** Composer and organist. Born at Boulogne, in 1837.

Guiraud, Ernest (*gwee-ro'*). Composer; France. B. 1837; d. 1892.

Gungl (*goong'-l*), **Joseph** (1810-89). Hungarian composer. Born at Zsámbék; died at Weimar. Wrote excellent dance music.

Gurlitt (*goor'-lit*), **Cornelius** (1820-1901). Composer. Born at Altona; died in Berlin. Wrote in many forms, his best works being piano and instructive pieces.

Gutmann, A. Composer; Germany. B. 1818; d. 1882.

Gyrowetz, A. (*gee'-ro-vetz*). Composer; Bohemia. B. 1763; d. 1850.

H

Habeneck (*ab-nek'*), **François Antoine** (1781-1849). Composer and violinist. Born at Mézières; died in Paris.

Haberbier, Ernst (*hah'-behr-beer*). Pianist and composer; Germany. B. 1813; d. 1869.

Hadley, Henry K. Composer; U. S. A. B. 1871.

Hale, Adam de la (*hahl*). Troubadour; France. B. 1240; d. 1287.

Halévy (*ah-leh-vee'*), **Jacques François** (1799-1862). Composer. Born in Paris; died at Nice. Opera writer of the French school. Principal work, "La Juive."

Hallé (*hal'-leh*), **Sir Charles** (1819-95). Pianist and conductor. Born at Hagen, Westphalia; died in Manchester. Studied at Darmstadt, under Rink. In 1836 went to Paris, and in 1846, with others, he instituted chamber concerts there. In 1848 went to England. Started his Manchester concerts in 1857. During his career of forty-seven years in that country he rendered great services to musical art as a teacher, by his recitals, undertaken singly or in conjunction with his accomplished wife, and by the concerts of his world-famous Manchester orchestra.

Hallé, Lady. See Neruda.

Halm, A. (*hahm*). Pianist and composer. B. 1789; d. 1872.

Hamerik, Asger. Composer; Denmark. B. 1843.

Hand (*hahnt*), **Ferdinand Gottfried** (1786-1851). Writer. Born at Plauen; died at Jena.

Handel, George Frederick (1685-1759). Composer. Born at Halle; died in London. Played both the organ and clavier when only seven years old. First opera, "Almira," performed at Hamburg, in 1705. In 1708 went to Italy, and four years later settled in England. In or about 1737 turned his attention to the oratorio, after having written some forty-two operas in accordance with the taste of the period. The approval which his first oratorios—"Esther," "Deborah," "Athalia"—had met with encouraged him to new efforts; and he produced in succession "Saul," "Israel in Egypt," "L'Allegro and Il Penseroso," and "The Messiah" (his chief work, 1741). "The Messiah" was not much appreciated at the first representation, but increased in reputation every year. In 1742 the "Samson" appeared, in 1746 the "Judas Maccabæus," in 1748 the "Solomon," and in 1752 the "Jephthah." In 1752 he became blind, but did not lose his spirits, continuing to perform in public and even to compose. He was buried in Westminster Abbey.

Hanslick, Ed. Critic; Bohemia. B. 1825; d. 1904.

Hardegen, J. von. Composer, pianist; Austria. B. 1834; d. 1867. (Jules Egghard.)

Hartnock, Carl E. Pianist. B. 1775; d. 1834.

Hartog, Edward. Pianist, composer; Holland. B. 1828.

Hartvigson, Anton. Pianist, composer; Sweden. B. 1845.

Hartvigson, Fritz. Pianist, composer; Sweden. B. 1851.

Haslinger, Tobias. Composer, publisher; Austria. B. 1787; d. 1842.

Hasse, Faustina (*has'-seh*). Soprano; Italy. B. 1700; d. 1783.

Hasse, J. A. Composer; Saxony. B. 1699; d. 1783.

Hatton, John Liptrot (1809-86). Composer and pianist. Born at Liverpool; died at Margate. Settled in London in 1832. In 1842 was appointed musical director of Drury Lane, and in 1844 produced in Vienna his opera "Pascal Bruno." Afterward Hatton brought out a successful collection of songs. In 1848 he visited America. During Charles Kean's Shakespearean revivals, Hatton was conductor at the Princess Theater, and wrote incidental music to many of Shakespeare's plays. Among his compositions are also an oratorio, "Hezekiah," various small operas, church music, etc. It is, however, for his songs that Hatton's name is remembered.

Hauck, Minnie (*howk*). Soprano; U. S. A. B. 1852.

Haupt, Karl (*howpt*). Theorist and organist; Germany. B. 1810; d. 1891.

Hauptmann, Moritz (*howpt'-man*). Theorist and teacher; Germany. B. 1792; d. 1868.

Haweis, H. R. (*hois*). Essayist; England. B. 1838; d. 1901.

Hawkins, Sir John (1719-89). Historian. Born in London; died at Twickenham. By profession an attorney. He was an original member of the Madrigal Society, also a member of the Academy of Antient Music, and of Dr. Johnson's club, which met on Thursday evenings in Ivy Lane. Hawkins's "General History of the Science and Practice of Music" is a monument of patient research, and a great storehouse of out-of-the-way information.

Haydn (*hi'-d'n*), **Johann Michael** (1737-1806). A brother of Joseph Haydn. Born at Rohrau; died at Salzburg. Wrote Church music.

Haydn, Joseph (1732-1809). Composer. Born at Rohrau, in Lower Austria; died in Vienna. The son of a wheelwright who was organist of the village church and a tenor singer. Haydn was a chorister and pupil in the choir-school of the Church of St. Stephen, at Vienna, until his eighteenth year, when he was dismissed for some trifling fault. For some time he struggled on, working industriously, but always on the verge of the most utter destitution, until, entering the service of the then renowned Italian composer Porpora, he was enabled, under his direction, to prosecute his studies amid more favorable surroundings. When twenty-eight years of age he was appointed kappelmeister to Prince Esterhazy, at Eisenstadt, Hungary, in whose service, and that of his successor, he remained for thirty years; living, for the greater part of the year, at the country-seat of the Esterhazys, discharging the various duties of his position, and writing an immense quantity of music, including most of his symphonies, quartets, trios, fifteen masses, an oratorio, eighteen operas, and a great body of music of a miscellaneous character. While Haydn remained thus, leading a life of tranquil industry, his reputation spread far and wide, and his visits to England, albeit undertaken somewhat unwillingly, were veritable triumphs. Seemingly inspired by Handel's example, Haydn, after his return to Vienna, produced the oratorios "The Creation" (1797), and "The Seasons" (1801). Haydn was an amazingly prolific composer. Among his works are 118 symphonies, 83 quartets, 24 trios, 19 operas, 5 oratorios, 24 concertos, 15 masses, 44 pianoforte sonatas, and many others. He created the modern symphony and quartet, and may be said to be the father of the instrumental music of the present.

Hayes, Catherine (1825-61). Soprano vocalist. Born in Limerick; died at Sydenham. Made her début at Marseilles. Appeared in opera in Italy and Austria. Returning to Ireland, created a tremendous furor by her exquisite singing of Irish airs.

Heap, Charles Swinnerton (1847-1900). Composer and pianist. Born and died at Birmingham. A Mendelssohn scholar. Studied in London and Leipzig. Wrote cantatas, an oratorio, "The Captivity," and various instrumental and vocal compositions.

Hegner (*hakh'ner*), **Otto.** Composer and pianist. Born at Basel, in 1876. Achieved a considerable reputation after his early début (1888).

Heller, Stephen (1815-88). Composer and pianist. Born at Pesth; died in Paris. Wrote many charming fantasias, études, polonaises, and drawing-room pieces generally, for the pianoforte.

Helmholtz, Hermann Ludwig (1821-94). Born at Potsdam; died at Charlottenburg. One of the greatest *savants* of modern times. Rendered a valuable service to musical art in the writing of his great work on sound and acoustics—"Lehre von den Tonempfindungen."

Henkel, H. Pianist, teacher and composer. B. 1822; d. 1899.

Hennes, Aloys (*hen'-nes*). Teacher and pianist; Germany. B. 1827.

Henschel (*hen'-shel*), **Georg.** Composer, barytone vocalist, pianist, and conductor. Born at Breslau, in 1850. Appeared in public at Berlin as a pianist when twelve years old. Studied at Leipzig. Made many concert tours in Germany as a singer. In 1881-84 conducted the Boston Symphony Orchestra. Has written operas, an oratorio, a requiem, a "Stabat Mater," some instrumental music, and a number of clever songs, in which last department of composition he shows to most advantage. Henschel has lived long in London, where he has made a great reputation as a teacher. His wife Lilian, *née* Bailey (1860-1901), an American soprano, shared his fame through the recitals, etc., in which they appeared together.

Hensel, Fanny Cäcilia (1805-47). Composer and pianist. Born at Hamburg; died in Berlin. A sister of Mendelssohn.

Henselt Adolph von (1814-89). Composer and eminent pianist. Born at Schwabach; died at Warmbrunn.

Herbert, Victor. Composer. Born in Dublin, Ireland, in 1859. Studied in Germany. Cellist and bandmaster. Played in Metropolitan, Thomas's, and Seidl's orchestras. In 1898 became conductor of the Pittsburg Orchestra. His works include an oratorio, "The Captive," comic operas, a cello concerto, songs, etc.

Hering, Carl G. Teacher and pianist; Germany. B. 1765; d. 1853.

Hérold (*eh-rold'*), **Louis Joseph Ferdinand** (1791-1833). Composer. Born and died in Paris. Wrote "Zampa," "Le pré aux clercs," and other operas.

Herz, Henry (*herts*). Pianist; Austria. B. 1806; d. 1888.

Hess, Willy. Violinist; Germany. B. 1859.

Hesse, Ad. F. (*hes'-seh*). Organist; Germany. B. 1809; d. 1863.

Heuschkel, J. P. (*hoysh'-kel*). Pianist and teacher; Germany. B. 1773; d. 1853.

Hill, Thomas Henry Weist (1828-91). Composer and violinist. Born at Islington; died in London.

Hiller, Ferdinand (1811-85). Composer and pianist. Born at Frankfort; died at Cologne. Founded the Conservatory at Cologne. Wrote symphonies, oratorios—"Destruction of Jerusalem," and "Saul"—six operas, overtures, sonatas, songs, etc.

Hiller, Johann A. Conductor and composer; Görlitz. B. 1728; d. 1804.

Himmel, F. H. Composer; Germany. B. 1765; d. 1814.

Hoffman, Richard. Pianist and teacher. Born in Manchester, England, in 1831. Studied under several distinguished masters. Since 1847 has lived in New York. He is well known as a pianist and a composer of pianoforte pieces, anthems, songs, etc., and has taken an active part in the development of music in this country. D. 1909.

Hofmann, H. Composer and pianist; Germany. B. 1842; d. 1902.

Hofmann, Josef. Pianist and composer. Born at Cracow, in 1877. Like his contemporary, Otto Henger, he was a prominent figure in the musical world as a "child pianist." After his first appearances as a "prodigy," he retired for study, and reappeared as a virtuoso of remarkable powers.

Hogarth, George (1783-1870). Cellist and composer. Born in Lauderdale; died in London. Wrote a number of interesting books on musical subjects. His eldest daughter married Charles Dickens.

Hol, Richard. Composer and pianist. B. 1825; d. 1885.

Holbrooke, Joseph C. Composer; England. B. 1878.

Holmès (properly **Holmes**), **Augusta Mary Anne** (1847-1903). Composer. Born in Paris, of English-Irish parents. In childhood a brilliant pianist. Her compositions include symphonies and other orchestral works, two operas, and a great number of songs.

Homer, Louise. Contralto; U. S. A. B. 1874 (?).

Horsley, Charles E., son of William. Composer; England. B. 1821; d. 1876.

Horsley, William. Composer; England. B. 1774; d. 1858.

Howell, Edward. Cellist. Born in London, in 1846. Professor of the violoncello at the Royal College of Music.

Huber, Hans. Pianist and teacher; Germany. B. 1852.

Hucbald. Theorist; Flanders. Tenth century.

Hueffer (*huf'fer*), **Francis** (1843-89). Composer and writer. Born at Münster; died in London. Was musical critic of the "Times" from 1878. Wrote several books—"Richard Wagner and the Music of the Future," "The Troubadours," "Musical Studies," etc.

Hullah, John Pyke (1812-84). Composer and organist. Born at Worcester, England; died at Westminster. Studied at the Royal Academy of Music. Wrote operas, songs, etc., but is better known as a zealous advocate of the Wilhelm method of musical instruction, and of music for the people.

Hüllmandel, N. (*heel'-man-del*). Pianist and composer; Alsace. B. 1751; d. 1823.

Hummel (*hoom'mel*), **Johann Nepomuk** (1778-1837). Composer and pianist. Born at Pressburg; died at Weimar. A pupil of Mozart and Albrechtsberger. A celebrated virtuoso in his day. Wrote masses, cantatas, operas, chamber-music, and other forms of composition.

Humperdinck (*hoom'per-dink*), **Engelbert.** Composer. Born at Siegburg, near Bonn, in 1854. Has written a "Humoresque" for orchestra, a choral ballad—"Wallfahrt nach Kevelaar"—and the remarkable opera, "Hänsel und Gretel," which has made him one of the most conspicuous composers of the day, besides other notable works.

Hünten (*hin'ten*), **Franz** (1793-1878). Composer and pianist. Born and died at Coblenz. Was for some years professor at the Paris Conservatoire. At one time a fashionable virtuoso and composer.

I

Incledon (*in'-k'l-don*), **Charles Benjamin** (1763-1826). Tenor vocalist. Born at St. Keverne, Cornwall; died at Worcester. Was for some years in the navy. Becoming noted for his fine tenor voice, Incledon was recommended to Sheridan and others, by officers under whom he had served. He appeared at Bath, Southampton, Vauxhall, Covent Garden, etc. Famous for his ballad-singing. In 1817 he visited America.

Indy, P. M. T. Vincent, d'. Composer and pianist; France. B. 1851.

Isouard, Nicolo (*e-soo-ar'*). Composer; Malta. B. 1775; d. 1818.

J

Jackson, William. Organist and composer; England. B. 1730; d. 1803.

Jacobsohn, S. E. (*yah'-cob-sone*). Violinist; Germany. B. 1839.

Jadassohn (*yah'-das-zon*), **Salomon** (1830-1902). Composer and pianist. Born at Breslau. A student of Leipzig Conservatory. From 1849 to 1852 a pupil of Liszt at Weimar; later studied with Hauptmann. He wrote symphonies, vocal compositions, chamber music, etc; also valuable works on harmony and other subjects. His text-books are in world-wide use.

Jaell, Alfred (*yale*). Pianist; Austria. B. 1832; d. 1882.

Jahn (*yahn*), **Otto** (1813-69). Philologist and archæologist, composer, and writer on music. Born at Kiel; died at Göttingen. His celebrated "Life of Mozart" is his chief contribution to musical literature.

Janiewicz, Felix (*yah'-nee-vich*). Violinist; Poland. B. 1762; d. 1848.

Janotha (*yah-no'-ta*), **Nathalie.** Pianist. Born at Warsaw.

Jansa (*yan'sa*), **Leopold** (1794-1875). Composer and violinist. Born at Wildenschwert; died at Vienna.

Janssens, J. F. (*yahn'-sens*). Composer; Belgium. B. 1810; d. 1890.

Jarvis, Charles H. Pianist; U. S. A. B. 1836; d. 1895.

Jensen (*yen'-sen*), **Adolph** (1837-79). Composer and teacher. Born at Königsberg; died at Baden. Notable as a song-writer as well as a composer of great originality in many other forms.

Joachim (*yo'-a-kheem*), **Joseph** (1831-1907). Violinist and composer. Born in 1831, at Kittsee, near Pressburg, in Hungary; died in Berlin. In 1843 went from the Vienna Conservatory to that of Leipzig. In 1850 became orchestral leader at Weimar, and in 1854 occupied the same position at Hanover. In 1869 was appointed professor and director of the newly instituted High School of Music at Berlin. The prince of modern violinists.

Jommelli, Niccolo (*yo-mel'lee*). Composer; Italy. B. 1714; d. 1774.

Joncières, Victorin de (*zhon-see-ehr*). Composer; France. B. 1839.

Joseffy, Rafael (*yo-sef'-fee*). Pianist, composer, and teacher. Born at Miskolcz, Hungary, in 1853. Studied under Moscheles at the Leipzig Conservatory and later under Tausig in Berlin. Successfully toured Europe, and about 1880 settled in New York, where his work as a teacher has been influential. For many years he was a member of the faculty of the National Conservatory of Music in New York. His pianoforte compositions show much skill and his playing excels in taste and execution. He is a fine interpreter of Chopin.

Josquin, Desprès (*zhos-kang' deh-pra'*). Composer; France. B. 1450; d. 1521.

Jullien (*zhool-leang*), **Adolphe.** Writer. Born in Paris, in 1845. An eminent Parisian musical critic.

Jullien, Louis Antoine (1812-60). Composer. Born at Sisteron. Gained a great reputation as a conductor and composer of dance music, etc. He was noted for practical musicianship, and with his magnificent orchestra he secured excellent performances of classical music.

Jungmann, A. (*yoong'-man*). Composer and pianist; Germany. B. 1814; d. 1892.

K

Kafka, J. C. Violinist; Austria. B. 1747; d. 1800.

Kafka, J. N. Composer and pianist; Bohemia. B. 1819.

Kalkbrenner (*kalk'-bren-ner*), **Friedrich Wilhelm Michael** (1788-1849). Composer and pianist. Born on a journey from Cassel to Berlin. Studied in Paris. Made many successful concert tours. Wrote an excellent "School" for his instrument, and also some fine études. Died at Enghien, near Paris.

Kalliwoda (*kal-li-vo'-da*), **Johann Wenzel** (1801-66). Composer and violinist. Born at Prague; died at Carlsruhe. Wrote a great deal of music for the violin, also symphonies, concert overtures, etc.

Kastner, J. G. (*kast'-ner*). Composer; Alsatia. B. 1810; d. 1867.

Keiser (*ki'-zer*), **Reinhard** (1674-1739). Composer. Born at Teuchern, near Weissenfels; died in Hamburg. Wrote an immense number of operas (singspiels) for the Hamburg Opera, of which he was director.

Kéler-Béla (*keh'-ler-beh'-la*) (**Albert von Kéler**) (1820-82). Violinist, conductor, and composer. Born at Bartfield; died at Wiesbaden.

Kelley, Edgar Stillman. Composer; U. S. A. B. 1857.

Kellogg, Clara Louisa. Singer; U. S. A. B. 1842.

Kerl, J. C. (*kerl*). Composer and organist; Bavaria. B. 1628; d. 1690.

Kettenus (*ket-teh'-noos*), **Aloys** (1823-96). Violinist and composer. Born at Verviers; died in London.

Kiel, Fredk. (*keel*). Composer; Germany. B. 1821; d. 1885.

Kiesewetter (*kee'-ze-vet-ter*), **Raphael Georg** (1773-1850). Writer. Born at Holleschau; died at Baden.

King, Julie Rivé. Pianist; U. S. A. B. 1856.

Kircher, A. Historian; Germany. B. 1602; d. 1680.

Kirnberger (*kern'-berkh-er*), **Johann Philipp** (1721-83). Composer and writer. Born at Saalfeld; died at Berlin.

Kittl, J. F. Organist; Bohemia. B. 1806; d. 1868.

Kjerulf (*k'ya'-roolf*), **Halfdan** (1815-68). Composer. Born and died at Christiania. Originally a theological student; afterward worked at Leipzig Conservatory. Wrote songs, pianoforte pieces, etc. His best work is in his songs.

Kleeberg, Clotilde. Pianist. Born in Paris, in 1866. Made successful tours.

Klein, Bruno Oscar. Pianist; Germany. B. 1858; d. 1911.

Klein, Michel R. (*kline, meeshel*). Pianist; Silesia. B. 1846.

Kneisel, Franz (*knigh'-zl*). Violinist; Rumania. B. 1865.

Kobbé, Gustav (*kob'-ba*). Critic; U. S. A. B. 1857.

Köhler, L. Pianist and composer; Germany. B. 1820; d. 1886.

Kontski, Antoine de (*kont'-skee*). Composer and pianist; Poland. B. 1817.

Kontski, Apollinaire de. Violinist; Poland. B. 1825; d. 1879.

Kotzeluch, J. A. (*kots'-eh-looch*). Composer; Bohemia. B. 1738; d. 1814.

Kotzeluch, L. K. Composer; Bohemia. B. 1748; d. 1814.

Kotzschmar, Hermann (*kotsh'-mar*). Organist and conductor; Germany. B. 1829.

Kotzwara, F. (*kots-vah'-rah*). Violinist; Bohemia. B. 1750; d. 1791.

Krebs, J. L. (*krapes*). Composer and organist; Germany. B. 1713; d. 1780.

Krebs, Marie (1851-1900). Pianist. Born and died in Dresden. Made concert tours in England, Germany and America.

Krebs, R. A. Composer; Germany. B. 1804; d. 1880.

Kreutzer, A. Auguste (*kroit'-zer*). Violinist; France. B. 1781; d. 1832.

Kreutzer, Konradin (1780-1849). Composer and pianist. Born at Messkirch, Baden; died at Riga. Wrote many operas, songs, etc. His opera, "Das Nachtlager von Granada," still survives in Germany.

Kreutzer, Leon, son of Rodolphe. Violinist; France. B. 1817; d. 1868.

Kreutzer, Rodolphe (1766-1831). Composer and violinist. Born at Versailles; died at Geneva. Professor at the Paris Conservatoire. Court violinist to Napoleon and to Louis XVIII. Beethoven dedicated the "Kreutzer" sonata to him. He wrote operas, violin concertos, duets, and other works. His "Forty-two Etudes or Caprices" are, or ought to be, the familiar companion of every violinist.

Krüger, Wm. (*kree'-ger*). Pianist; Germany. B. 1820; d. 1883.

Krumpholz, J. B. (*kroomp'-holts*). Harpist; Bohemia. B. 1745; d. 1790.

Krumpholz, W., brother of J. B. Harpist; Bohemia. B. 1750; d. 1817.

Kubelik, Johann (*koo'-be-lik*). Violinist; Bohemia. B. 1880.

Kücken (*kik'-'n*), **Friedrich Wilhelm** (1810-82). Composer. Born at Bleckede, near Hanover; died at Schwerin. Wrote operas and many popular songs.

Kufferath, H. F. (*koof'-e-raht*). Germany. Pianist and composer. B. 1808; d. 1882.

Küffner, J. (*keef'-ner*). Pianist; Germany. B. 1776; d. 1856.

Kuhe, W. (*koo'-eh*). Pianist; Bohemia. B. 1823.

Kuhlau (*koo'-low*), **Friedrich** (1786-1832). Composer and flautist. Born at Ulzen, Hanover; died at Copenhagen. Survives as a writer of educational music for the pianoforte.

Kuhnau, J. (*koo'-now*). Composer and organist; Germany. B. 1667; d. 1722.

Kullak, Adolf (*kool'-lak*). Composer and essayist; Germany. B. 1823; d. 1862.

Kullak, Theodor (1818-82). Composer, pianist, writer, and eminent teacher. Born at Krotoschin, Posen; died in Berlin. He was intended for the legal profession, but devoted himself to music. Was instrumental in founding two conservatories in Berlin. In 1861 he received the title of royal professor. Wrote many pianoforte compositions of an elegant, drawing-room kind.

Kummer, F. A. (*koom'-mer*). Cellist; Germany. B. 1797; d. 1879.

L

Labitzky (*la-bit'-shki*), **Josef** (1802-81). Composer and violinist. Born at Schönfeld; died at Carlsbad. Wrote a great deal of highly artistic dance music, somewhat in the fashion of Strauss and Lanner.

Lablache (*la-blash'*), **Luigi** (1794-1858). Bass vocalist. Born and died at Naples. Achieved a world-wide reputation as an operatic artist, both for his acting and singing, in serious and buffo parts.

Lachner (*lakh'-ner*), **Franz** (1803-90). Composer. Born at Rain, Bavaria; died in Munich. Wrote largely in all styles of musical composition. Best in his orchestral suites, showing great contrapuntal skill, and in his songs.

Lachner, Ignaz. Composer and conductor; Bavaria. B. 1807; d. 1895.

Lachner, Theodor. Organist and director; Bavaria. B. 1798; d. 1877.

Lachner, Vincenz. Organist and conductor; Bavaria. B. 1811; d. 1893.

Lack, Theodor. Composer; France. B. 1846.

La Grange, Anna (*lah-gronzh*). Soprano; Paris. B. 1825.

Lalo (*lah-lo'*), **Edouard Victor Antoine** (1823-92). Composer and violinist. Born at Lille; died in Paris. Wrote operas—"Namouna," "Fiesque," "Le roi d'Ys"—suites, and two concertos, one of them the remarkable "Symphonie espagnole."

Lambert, Alexander. Pianist; Poland. B. 1862.

Lambeth, Henry Albert (1822-95). Composer and organist. Born at Gosport. Well known as director of the celebrated "Lambeth's Choir."

Lambillote, Louis (*lam-bee-yote*). Composer; France. B. 1797; d. 1855.

Lamond, Frederic. Composer and pianist. Born in Glasgow, in 1868. One of the great contemporary pianoforte virtuosi.

Lamoureux, Ch. (*lah-mo-roo*). Violinist and conductor; France. B. 1834; d. 1899.

Lamperti, F. (*lam-pehr'-tee*). Singer; Italy. B. 1813; d. 1892.

Lang, Benj. J. Composer, pianist and conductor; U. S. A. B. 1840; d. 1910.

Lange, Gustav (*lang'-eh*). Composer and pianist; Germany. B. 1830; d. 1889.

Lanner, Jos. F. K. (*lan'-ner*). Composer; Austria. B. 1801; d. 1843.

Laport, Ch. P. (*lah-port*). Composer; Paris. B. 1781; d. 1839.

Lassen, Eduard. Composer; Denmark. B. 1830; d. 1904.

Lasso, Orlando di (Orlandus Lassus). Composer; Netherlands. B. 1520; d. 1594.

Lavallée, Calixa (*lah-vah-leh*). Composer and pianist; Canada. B. 1842; d. 1888.

Lavignac, Albert (*lah-veen'-yak*). Theorist; France. B. 1846.

Lavigne (*lah-veen'*), **Antoine Joseph** (1816-86). Oboist. Born at Besançon; died in Manchester. An oboe virtuoso of unusual powers.

Lazarus, Henry (1815-95). Clarinettist. Born and died in London. Like Lavigne, the oboe player, Lazarus was truly a great artist on his instrument.

Le Carpentier, Adolphe C. (*le car-pong-tee-eh*). Composer and pianist; Paris. B. 1809; d. 1869.

Léclair (*leh-klar'*), **Jean Marie** (1687-1764). Composer and violinist. Born in Lyons; died (assassinated) in Paris. Sometimes called the "French Tartini."

Lecocq, Alex. Ch. (*le-kok'*). Composer; Paris. B. 1832.

Lecouppey, Félix (*le-coop'-pay*). Composer and pianist; Paris. B. 1814; d. 1887.

Le Duc, Alphonse. Composer and pianist; France. B. 1804; d. 1868.

Lefébure-Wély (*le-feh-boor'-veh-lee'*), **Louis James Alfred** (1817-69). Composer and organist. Born and died in Paris. Famous for his improvisation on the organ.

Lehmann, Lilli (*la'-man*). Soprano. Born in Würzburg, in 1848. Made her début in Berlin in 1870. She became famous in Europe and America as one of the greatest of Wagnerian singers.

Lehmann, Liza. Composer; England. B. 1862.

Lemmens, Nicholas J. Organist; Holland. B. 1823; d. 1881.

Lemoine, Henri. Composer and pianist; Paris. B. 1786; d. 1854.

Leoncavallo (*la-on-ka-val'-lo*), **Ruggiero.** Composer. Born at Naples, in 1858. His first opera, "Tommaso Chatterton," after failing, was revived with great success. He produced a great trilogy, "Crepusculum," a historic play dealing with the Italian Renaissance. In this task he was encouraged by Wagner, of whom he was a devoted admirer. His widest reputation rests on the two-act opera, "I Pagliacci," produced in 1892. His other works include "La Bohème," "La Tosca," "Trilby," "Zaza," etc.

Leroux (*lu-roo'*), **Xavier H. N.** Composer; Papal States. B. 1863.

Leschetizky (*le-she-tit'-shki*), **Theodor.** Composer and pianist. Born in Lemberg, in 1831. Perhaps the most celebrated pianoforte teacher of his time.

Leslie, Henry D. Composer and conductor; London. B. 1822; d. 1896.

Levi (*la'-vee*), **Hermann.** Composer and conductor. Born at Giessen, in 1839. Died, Munich, 1900.

Leybach, Ignace (*li'-bach*). Composer and pianist; Alsace. B. 1817; d. 1891.

Lickl, J. G. Composer and organist; Germany. B. 1769; d. 1841.

Liebling, Emil (*leeb'-ling*). Pianist; Silesia. B. 1851.

Lille, Gaston de (*leel*). Composer; France. B. 1825.

Lind, Jenny (1820-87). Soprano vocalist. Born at Stockholm; died at Malvern. Made many tours, everywhere exciting enthusiasm by her operatic impersonations, and still more by her rendering of the simplest national melodies. In 1852 she married Otto Goldschmidt in Boston.

Lindley, Robert. Cellist; England. B. 1776; d. 1855.

Lindley, William, son of Robert. Cellist; England. B. 1802; d. 1869.

Lindpaintner (*lint'-pint-ner*), **Peter Joseph von** (1791-1856). Composer and eminent conductor. Born at Coblenz; died at Nonnenhorn, on the Lake of Constance. Wrote operas, symphonies, church music, etc. His most widely known composition is the celebrated song, "The Standard Bearer."

Linley, George. Composer; England. B. 1798; d. 1865.

Linley, Thomas. Composer; England. B. 1732; d. 1795.

Linley, William. Composer; England. B. 1767; d. 1835.

Lipinski, Karl J. (*lip-in'-skee*). Violinist; Poland. B. 1790; d. 1861.

Listemann, B. F. (*lis'-teh-man*). Violinist; Germany. B. 1841.

Liszt (*list*), **Franz** (1811-86). Composer and pianist. Born at Raiding, near Oedenburg, Hungary; died at Bayreuth. At nine years of age possessed considerable skill as a pianist.

Studied under Czerny and Salieri in Vienna, and afterward in Paris. In 1848 he went to Weimar as conductor of the court orchestra, and by his exertions and the rare fascination of his artistic personality quickly made Weimar one of the vital musical centers of the Continent. Marvelous as a pianist, Liszt also distinguished himself greatly as a composer, and a considerable body of music in all styles bears his name. He was also an author of much merit, and made important contributions to the literature of music. As a composer he belonged to the ultra-modern school, although a man of most catholic sympathies in art; and his music, while unequal, contains many flashes of inspiration, and happy uses of a wonderfully complete technique. Altogether, Liszt is one of the most remarkable figures in musical history.

Litolff (*lee'-tolf*), **Henry Charles** (1818-91). Composer and pianist. Born in London; died in Paris.

Lloyd, Edward. Tenor vocalist. Born in London, in 1845. When seven years of age entered the choir of Westminster Abbey. Appeared at concerts in St. James's Hall in 1867, and at the Gloucester Festival in 1871. From that time he stood in the forefront of his profession. In 1888 he sang at the Cincinnati Festival. He gave a farewell concert in London in 1900.

Lobe (*lo'-be*), **Johann Christian** (1797-1881). Composer, flutist, viola-player, and writer. Born at Weimar; died at Leipzig. Author of some excellent theoretical treatises.

Locatelli, Pietro (1693-1764). Composer and violinist. Born at Bergamo; died at Amsterdam. He possessed remarkable powers of execution.

Logier, J. B. (*lo'-jeer*). Composer; Germany. B. 1780; d. 1846.

Löhr (*lehr*), **Frederick** (1844-88). Composer. Born at Norwich; died at Plymouth.

Lombard, Louis. Violinist and critic; France.

Lortzing, Gustav Albert (1803-51). Composer and tenor vocalist. Born and died in Berlin. Wrote a number of operas, including "Die beiden Schützen" and "Czar und Zimmermann."

Löschhorn, Albert (*lesh'-horn*). Pianist and composer; Germany. B. 1819.

Louis (Prince Ludwig F. C., of Prussia). Composer. B. 1772; d. 1806.

Lover, Samuel (1797-1868). Artist, author, and composer. Born in Dublin; died in Jersey. Wrote many well-known songs.

Löwe (*leh'-ve*), **Johann Karl Gottfried** (1796-1869). Composer, organist, and pianist. Born at Löbejün, near Halle; died at Kiel. He studied theology and music. In 1822 became cantor, and afterward musical director of the Church of St. James, at Stettin. Wrote oratorios, operas, part-songs, chamber music, and, more important than all, great ballads which have made his name famous.

Lucca, Pauline. Soprano vocalist. Born in Vienna, in 1841. Made a great reputation in opera. Died, Paris, 1908.

Lulli, Jean Baptiste (1633-87). Composer and violinist. Born in Florence; died in Paris. Brought to France as a boy. From being a scullion, rose to be chief musician of Louis XIV. In 1671 appointed director of the Grand Opera at Paris. He is regarded as the founder of the French opera.

Lumbye, Hans C. (*loom'-bee*). Composer; Denmark. B. 1808; d. 1874.

Lutz (*loots*), **Wilhelm Meyer.** Composer. Born at Männerstadt, in 1829. Well known as a composer of comic operas.

Lynes, Frank. Organist; U. S. A. B. 1858.

Lysberg, Ch. S. (*lees'-berkh*). Composer and pianist; Switzerland. B. 1821; d. 1873.

M

Maas (*mas*), **Joseph** (1847-86). Tenor vocalist. Born at Dartford; died in London.

MacCunn, Hamish. Composer. Born at Greenock, in 1868. Has written several choral works—"Kilmeny," "Lord Ullin's Daughter," etc.—two interesting concert overtures, operas, cantatas, and many songs and instrumental pieces.

MacDowell, Edward Alexander (1861-1908). Composer. Born and died in New York. Studied in Paris and Germany. In 1881-82 was head teacher of the piano department of the Darmstadt Conservatory. From 1896 to 1904 was professor of music in Columbia University. He achieved a world-wide reputation as one of the most original and vigorous composers of his time. His works include symphonic poems, orchestral suites, choruses, piano concertos, suites, sonatas and études, and several fine songs.

Macfarren, Sir George Alexander (1813-1887). Composer. Born and died in London. Studied at the Royal Academy of Music, where he became professor in 1860, and principal (in succession to Sir William Sterndale Bennett) in 1875. Produced a great quantity of music—operas, oratorios, cantatas, Church music, overtures, symphonies, chamber music, songs, etc. Besides these works, and his extensive official duties, he also rendered good service to musical art as editor of musical classics, and as a writer of various theoretical and critical works.

Macfarren, Walter C. Composer and pianist; London. B. 1826.

M'Guckin, Barton. Tenor vocalist. Born in Dublin, in 1853.

Macintyre, Margaret. Soprano vocalist. Born in India.

Mackenzie, Sir Alexander Campbell. Composer. Born in Edinburgh, in 1847. In 1857 went to Germany, where he studied music. Returned to London in 1862 and became a pupil of Sainton, winning the King's Scholarship at the Royal Academy of Music in the same year. In 1865 settled in Edinburgh as a teacher, meanwhile devoting much of his time to composition. Later, after some years spent abroad, settled in London. His compositions—the cantatas "Jason," "Sayid," etc.; the oratorio "The Rose of Sharon," perhaps his best work; the poetic "Dream of Jubal"; his operas "Colomba" and "The Troubadour," together with a great deal of orchestral and other music, have placed him in the front rank of English musicians.

Maggini, G. P. (*mad-jee'-nee*). Violin-maker; Italy. B. 1581; d. 1632.

Mahler, Gustav. Conductor; Bohemia. B. 1860; d. 1911.

Maitland, J. A. Fuller. Musical critic; England. B. 1856.

Malcolm, Alexander (1687-17—). Writer. Born in Edinburgh. Author of "A Treatise of Musick," published in Edinburgh, in 1721.

Malibran, Maria Felicita (1808-36). Mezzo-soprano vocalist. Born in Paris; died in Manchester. A daughter of the famous tenor Garcia, by whom she was trained. One of the most gifted singers of modern times. Achieved a phenomenal success in opera.

Mälzel (*mel'tsel*), **Johann Nepomuk** (1772-1838). Inventor. Born at Ratisbon; died at sea. Invented the metronome now in common use.

Manns, Sir August. Conductor. Born at Stolzenberg, near Stettin, in 1825. Clarinettist in a military band, and violinist in the theater orchestra at Stettin. In 1854 went to England. and in the following year was appointed conductor at the Crystal Palace, a post which for more than half a century he held with benefit to the cause of musical art.

Marcello, Benedetto (1686-1739). Composer. Born at Venice; died at Brescia. His principal work as a composer was the musical setting of the Psalms.

Marchesi, Mathilde de C. (*mar-keh'-see*). Soprano and famous singing-teacher; Germany. B. 1826.

Maretzek, Max. Composer and conductor; Brunn. B. 1821; d. 1897.

Mario (*mah'-ree-o*), **Guiseppe** (1812-1883). Tenor vocalist. Born at Genoa; died in Rome. Belonged to the nobility (he was Marchese di Candia), and in 1830 received his commission as an officer in the Sardinian army. Shortly afterward, through some escapade, was forced to flee the country. Went to Paris in 1836, and after two years' study, appeared with conspicuous success in "Robert le Diable." Thenceforward enjoyed a triumphant career as an operatic artist. He left the stage in 1867.

Marmontel, A. F. Pianist and composer; France. B. 1816; d. 1898.

Marpurg, F. W. (*mar-poorkh*). Composer; Germany. B. 1718; d. 1795.

Marshner (*marsh'-ner*), **Heinrich** (1795-1861). Composer. Born at Zittau; died at Hanover. Studied music in Vienna. Wrote several operas, chief of them being "The Vampire" and "Hans Heiling." Also wrote orchestral, choral, and pianoforte works of a high order.

Marteau, Henri (*mar-toh'*). Violinist; France. B. 1874.

Martini (*mar-tee'nee*), **Giambattista** (called **Padre Martini**) (1706-84). Composer and writer. Born and died at Bologna. In his day regarded as the greatest living authority on all musical matters.

Marx, Adolf Bernhard (1798-1866). Born at Halle; died in Berlin. Originally a lawyer, but afterward devoted himself to music. As a composer was not successful, but wrote many very valuable theoretical and critical works.

Mascagni (*mas-kan'yee*), **Pietro.** Composer. Born at Leghorn, in 1863. Son of a baker, and intended by his father for the legal profession. Was at length permitted to follow his true vocation. Studied in Milan, and afterward led a precarious existence traveling about Italy with small opera companies. One day he saw an announcement of prizes offered by Sonzogno, the Italian music-publisher, for one-act operas. He took part in the competition, completing "Cavalleria Rusticana" in the nick of time. With this opera, which at once introduced him to the world as one of the most remarkable composers of the day, he won the first prize. Has since then produced other operas and smaller compositions. In 1902 he toured America.

Mason, Lowell (1792-1872). Composer and teacher. Born in Boston; died at Orange, N. J. A pioneer in American musical development. Founded the Boston Academy of Music in 1832. His works include many collections of Church music containing well-known hymn-tunes, collections of songs, etc.

Mason, Luther Whiting (1821-96). Musical educator. Born at Turner, Maine; died at Buckfield, Maine. Inventor of "The National Music Course." Settled in Boston in 1865, and till 1880 was musical instructor in the public schools of that city. He worked in Japan, 1880-83, and did much for the advancement of school music there.

Mason, William (1829-1908). Pianist and teacher, son of Lowell Mason. Born in Boston; died in New York. Studied at Leipzig, and afterward under Liszt at Weimar. After concert tours he settled in New York in 1855. Among his works are many compositions, but he is best represented by his excellent text-books.

Massé (*ma-sa'*), **Victor** (**Félix Marie**) (1822-84). Composer. Born at Lorient; died in Paris. Wrote "Le fils du brigadier," "Les noces de Jeannette," "Galatée," "Paul et Virginie," and other operas.

Massenet (*mas-na'*), **Jules Émile Frédéric.** Composer. Born at Montaud, near St.-Étienne, in 1842. Gained the Grand Prix de Rome in 1863 with his cantata "David Rizzio." His principal works include the operas "Don César de Bazan," "Le roi de Lahore," "Hérodiade," "Manon," "Le Cid," "Werther," "Thaïs," "Le Jongleur de Notre-Dame," etc.

Materna, Amalie. Soprano vocalist. Born at St. Georgen, in 1847. Celebrated Wagnerian operatic singer.

Mathews, W. S. B. Pianist and writer; U. S. A. B. 1837.

Mattei, Tito (*mat-ta'-ee*). Composer and pianist. Born at Campobasso, in 1841. Has written several operas, instrumental music, and many songs.

Maurel (*mo-rel'*), **Victor.** Barytone vocalist. Born at Marseilles, in 1848. Acquired great fame in Europe and America. Created Iago in Verdi's "Otello" and set the standard of other leading rôles.

Maybrick, Michael. Composer and barytone vocalist. Born in Liverpool, in 1844. Well known by his songs, written under the pseudonym of "Stephen Adams."

Mayer, Karl (*mi'er*). Composer and pianist; Germany. B. 1799; d. 1862.

Mayseder (*mi'-za-der*), **Joseph** (1789-1863). Composer and violinist. Born and died in Vienna.

Mazas (*ma-za'*), **Jacques Féréol** (1782-1849). Composer and violinist. Born at Béziers; died at Cambrai.

Mazzinghi, J. (*mat-zin'gee*). Composer; London. B. 1765; d. 1844.

Mehlig, Anna. Pianist. Born at Stuttgart, in 1846.

Méhul (*ma-ül*), **Étienne Nicholas** (1763-1817). Composer. Born at Givet, in the Ardennes; died in Paris. At eleven years of age was organist of his native place. His principal work is his "Joseph." He also wrote, among other operas, "Le Jeune Henri," the clever overture of which still figures in concert programmes.

Melba, Nellie. Operatic soprano; Australia. B. 1865.

Mellon, Alfred (1820-67). Composer and violinist. Born and died in London. An excellent conductor.

Mendelssohn-Bartholdy (*men'-d'l-son-bar-tol'-dee*), **Felix** (1809-47). Composer, pianist, and organist. Born at Hamburg; died at Leipzig. Son of a banker and grandson of the Jewish philosopher, Moses Mendelssohn. Early showed a great talent for music, which was carefully cultivated from the outset. In 1833, already possessed of a European reputation, was appointed musical director at Düsseldorf. Two years later went to Leipzig as conductor of the Gewandhaus concerts. Between 1835 and 1841 he produced his pianoforte concerto in D minor, the 42d and 114th psalms, string quartet in E minor, overture to "Ruy Blas," trio in D minor, and the "Hymn of Praise." Between 1841 and 1847 he wrote "St. Paul," "Walpurgis Night," "Athalie," "Elijah," "Christus," C minor trio, and many other works. Great as are his oratorios, "St. Paul" and "Elijah," the characteristic genius of Mendelssohn finds perhaps its most perfect expression in the "Midsummer Night's Dream" music, and in the two concert overtures "The Hebrides" and "The Calm Sea."

Menter, Sophie. Pianist. Born at Munich, in 1848. Studied with several masters, including Tausig and Liszt. Made many tours and had famous pupils. Was court pianist to the Emperor of Austria, and later a member of the faculty of the St. Petersburg Conservatory.

Mercadante (*mer-ka-dan'-te*), **Francesco Saverio** (1795-1870). Composer. Born at Altamura; died in Naples. Wrote operas in the Rossinian style; also composed much church music, several symphonies, etc. In 1840 he succeeded Zingarelli as director of the royal conservatory at Naples. In 1862 he became totally blind.

Merkel, Gustav. Organist and composer; Germany. B. 1827; d. 1885.

Merz, Karl (*merts*). Composer and writer; Germany. B. 1834; d. 1893.

Messager, André (*mes-sah-zhay*). Composer; France. B. 1855.

Meyer, Leopold von (*mi'-er*). Pianist; Austria. B. 1814; d. 1883.

Meyerbeer (*mi'-er-behr*), **Giacomo** (1791-1864). Composer. Born in Berlin; died in Paris. Displayed musical talent at a very early age, particularly as a pianist. His ruling ambition, however, was to become a composer. A pupil of the Abbé Vogler, he wrote a number of works which, excellent in their way, were marred by their extreme pedantry. Coming under the influence of Rossini, Meyerbeer forsook the methods of Vogler for the more attractive style of the Italians, and wrote several very successful operas in the Italian style. In later years he again changed his style of writing, and with Scribe as his librettist, produced the series of grand operas, "Robert le Diable," "Les Huguenots," "Le Prophète," "L'Etoile du Nord," "Dinorah," and "L'Africaine," upon which his fame as a composer mainly depends.

Meyer-Olbersleben, Max (*mi-er-ohl'-ber-sleh-ben*). Composer and teacher; Germany. B. 1850.

Mills, S. B. Composer and pianist; England. B. 1839; d. 1898.

Mohr, Hermann. Composer and conductor; Germany. B. 1830; d. 1896.

Molique (*mo-leek'*), **Wilhelm Bernhard** (1802-69). Violinist and composer. Born at Nuremberg; died at Cannstatt, near Stuttgart. Made several concert tours through Germany. From 1849 to 1866 resided in England, and enjoyed a great reputation as a soloist, quartet player, and teacher. Wrote violin concertos, string quartets, a symphony, two masses, and an oratorio, "Abraham."

Molloy, James Lyman. Composer. Born at Cornolore, in 1837. A popular song-writer. D. 1910.

Monsigny (*mong-seen-yee'*), **Pierre Alexandre** (1729-1817). Composer. Born near St.-Omer; died in Paris. Wrote operas and ballets.

Monteverde, Claudio (1568-1643). Composer. Born at Cremona; died in Venice. Inventor of the "free style" of composition and pioneer in the path that led to modern opera. He was the first to use unprepared dissonances. His improvement of the orchestra gained for him the title of "the father of the art of instrumentation." His innovations were successfully employed in his operas "Arianna" and "Orfeo" and in later works. He wrote much sacred music, the greater part of which is lost. His influence on other composers was marked in his own day and the results of his work have been lasting. Much of his church composition was done while he was maestro di capella at St. Mark's, in Venice. In 1633 he was admitted to the priesthood.

Moore, Thomas (1779-1852). Composer. Born in Dublin; died at Devizes. Wrote some of the airs in his "Irish Melodies," the "Canadian Boat Song," the pretty little three-part glee "The Watchman," etc.

Morgan, G. W. Organist; England. B. 1823; d. 1895.

Morley, Thomas (1557-1604). Composer and writer. Born and died in London. Did much for the development of vocal music.

Mornington, Garret Wellesley, Lord (1735-81). Composer. Born at Dangan; died at Kensington. Wrote church music, glees, madrigals, etc. Father of the Duke of Wellington.

Moscheles (*mosh'-e-les*), **Ignaz** (1794-1870). Composer and pianist. Born at Prague; died at Leipzig. A pupil of Albrechtsberger and Salieri. Made successful tours on the Continent, and from 1821 to 1846 lived in London, where he won his greatest fame. His numerous compositions include a variety of instrumental works, among which are many valuable studies.

Moszkowski (*mosh-kof'-shki*), **Moritz.** Composer and pianist. Born at Breslau, in 1854. Among his works are a symphonic poem, "Jeanne d'Arc," an opera, "Boabdil," pianoforte compositions, songs, etc.

Mottl, Felix. Conductor; Austria. B. 1856; d. 1911.

Mozart (*mo'-tsart*), **Leopold** (1719-87). Composer and violinist. Born at Augsburg; died at Salzburg. The father of Wolfgang Amadeus Mozart. Wrote church music, oratorios, and operas. He also wrote a "Violin School," which went through many editions in various languages.

Mozart, Maria Anna (1751-1829). Pianist. Born and died at Salzburg. A daughter of Leopold Mozart. With her brother Wolfgang she was taken on tour through Europe as a musical prodigy.

Mozart, Wolfgang Amadeus (1756-91). Composer and pianist. Born at Salzburg; died in Vienna. Excited universal enthusiasm as a child pianist in Germany, France, Italy, and England. In 1768 was commissioned by the Emperor Joseph II to write a comic opera ("La Finta Semplice"). Wrote "Idomeneo" in 1781, "Die Entführung aus dem Serail" in 1782, and in 1786 "Figaro," the intervening years witnessing the production of many pianoforte-concertos, sonatas, quartets, etc. During the five years between 1786 and his death Mozart poured out a marvelous flood of masterpieces—"Don Giovanni," "Zauberflöte," "Cosi fan tutte," "Clemenza di Tito"; the three great symphonies in E flat major, G minor, and C major ("Jupiter"); the "Requiem," and a great body of music of all kinds. During his life of thirty-six years Mozart is known to have written at least 626 works, among which are 20 masses, 17 organ sonatas, 40 offertories, 10 cantatas, 23 operas, 22 sonatas for the pianoforte, 45 sonatas for piano and violin, 49 symphonies, and 55 concertos, besides quartets, trios, songs, etc. All this was accomplished by a busy teacher and virtuoso.

Mozart, Wolfgang Amadeus (1791-1844). Composer and pianist. Born in Vienna; died at Carlsbad. Younger son of the great Mozart. His elder brother, Karl, entered the Austrian civil service.

Murska (*moor'-shka*), **Ilma de** (1835-89). Soprano vocalist. Born in Croatia; died at Munich.

Mysliweczek, J. (*mis'-leh-veh-chek*). Composer; Bohemia B. 1737; d. 1781.

N

Nachez, Tivadar. Composer and violinist. Born at Budapest, in 1859.

Nägeli, J. G. (*nay'-ge-lee*). Composer and writer; Switzerland. B. 1768; d. 1836.

Nardini (*nar-dee'-nee*), **Pietro** (1722-93). Composer and violinist. Born at Fibiana; died at Florence.

Naumann (*now'-man*), **Emil** (1827-88). Composer, organist, and writer. Born in Berlin; died at Dresden.

Neefe, Ch. G. (*neh'-feh*). Organist and composer; Saxony. B. 1748; d. 1798.

Neidlinger, William Harold. Composer and teacher. Born in Brooklyn, in 1863. His works include several hundred songs, some of which are well known, two operas, much sacred music, numerous songs for children, and educational books. Was for twenty years conductor of choral societies.

Néruda, J. B. G. (*neh-roo'-da*). Composer, violinist; Bohemia. B. 1707; d. 1780.

Néruda (Normann-Neruda), Wilma Maria Francisca. Violinist. Born at Brünn, in 1839. Appeared in public as a violinist as early as 1845. In 1864 married Ludwig Normann. In 1888 married Sir Charles Hallé. Made many concert tours throughout Europe, and visited Australia and the United States. (1899). D. 1911.

Nessler, Victor (1841-90). Composer. Born at Baldenheim; died at Strasburg. Among his operas are "Der Rattenfänger von Hameln" and "Der Trompeter von Säkkingen," the latter a universal favorite.

Neukomm (*noi'-kom*), **Sigismund** (1778-1858). Composer and conductor. Born at Salzburg; died in Paris. A pupil of Haydn. His compositions number several hundred and include the oratorios "Mount Sinai" and "David."

Nevin, Arthur Finley. Composer; U. S. A. B. 1871.

Nevin, Ethelbert (1862-1901). Born at Edgeworth, Pa.; died at New Haven. Studied in this country and in Europe, and taught and composed on both sides of the Atlantic. His piano pieces and songs show much originality and fine artistic taste.

Newman, Ernest. Critic; England. B. 1869.

Nicode, J. L. (*nee'-ko-day*). Composer; Polish Silesia. B. 1853.

Nicolai (*nee'-ko-li*), **Otto** (1810-49). Composer and organist. Born at Königsberg; died in Berlin. Wrote church music and operas. Survives as the composer of "The Merry Wives of Windsor."

Nicolini, E. (*nik-o-lee'-nee*). Tenor; France. B. 1834.

Niecks (*neeks*), **Frederick.** Musician and writer. Born at Düsseldorf, in 1845. For many years resident in Dumfries as a teacher. In 1891 became Reid Professor of Music and dean of the faculty of music in Edinburgh University. His works include a "Dictionary of Musical Terms" and "Chopin as a Man and Musician."

Niedermayer, L. (*ne'-der-mi-er*), Composer; France. B. 1802; d. 1861.

Nietzsche, Friedrich (*neet'-she*). Writer on music; Germany. B. 1844; d. 1900.

Nikisch, Arthur. Conductor; Hungary. B. 1855.

Nilsson, Christine. Soprano vocalist. Born near Wexiö, in 1843. Played the violin and the flute at fairs and markets. When fourteen years of age was sent to Halmstadt to be educated. Afterward went to Stockholm, and later to Paris. Made her first appearance in opera as Violetta in Verdi's "Traviata" in 1864. Her career was highly successful and she enjoyed equal fame in Europe and America.

Nohl, Karl F. L. Author; Germany. B. 1831; d. 1885.

Nordica, Lillian. Soprano vocalist. Born (Lillian Norton) at Farmington, Maine, in 1859. Studied at the New England Conservatory, Boston, and in that city made her début in 1876. Toured Europe with Gilmore's Band; studied opera at Milan with San Giovanni; first appeared in opera at Brescia, Italy, in "La Traviata," and entered upon a career in which for many years she ranked among the leading artists of the world, being especially distinguished in Wagnerian rôles. Madame Nordica has been thrice married.

Norris, Homer A. Composer; U. S. A. B. 1860.

Nottebohm, M. G. (*not'-teh-bome*). Composer, writer; Germany. B. 1817; d. 1882.

Nourrit, Adolphe (*noor-ree'*). Tenor; France. B. 1802; d. 1839.

Nourrit, Louis. Tenor; France. B. 1780; d. 1831.

Novello (*no-vel'-lo*), **Clara A.** (daughter of Vincent). Soprano; England. B. 1818.

Novello, Mary S. (daughter of Vincent). Soprano; England. B. 1809; d. 1898.

Novello, Jos. A. (son of Vincent). Bass; England. B. 1810; d. 1896.

Novello, Vincent (1781-1861). Composer, organist and pianist. Born in London; died at Nice. As one of the founders of the London Philharmonic Society and of the music publishing house of Novello & Co. (1811), and by his labors as editor of musical works, he did much to advance the art to which his energies were devoted. His many compositions—most of them sacred—also entitle him to honorable remembrance.

Nunn, John H. Composer and organist; England. B. 1827; d. 1905.

O

Oakeley, Sir Herbert Stanley (1830-1903). Composer, pianist, and organist. Born at Ealing. Educated at Rugby and Oxford. Studied music under Moscheles and Plaidy at Leipzig, and under Schneider at Dresden. Succeeded to the chair of music at Edinburgh University in 1865, and from that time until his resignation in 1891 did good work for music in Scotland, fostering the taste for orchestral music of the highest class by the institution of an annual "Reid Festival." He founded the University Musical Society in Edinburgh, an example followed by the other Scottish universities. In connection with British musical culture, his famous organ recitals had great effect. He received many academic honors. He was composer (in Scotland) to Queen Victoria, who knighted him in 1876. Oakeley wrote a cathedral service, anthems, the cantata "Jubilee Lyric," excellent songs, pianoforte compositions, an organ sonata, orchestral music, etc.

Oberthür, Ch. (*o'-behr-teer*). Harpist and composer; Bavaria. B. 1819; d. 1895.

Oesten, Theodor (*a'-shten*). Composer and pianist; Germany. B. 1813; d. 1870.

Offenbach (*of'-fen-bakh*), **Jacques** (1819-80). Composer. Born at Cologne; died in Paris. Wrote a number of exceedingly clever comic operas—"La fille du tambour-major," "Orphée aux enfers," "La belle Hélène," and others.

O'Leary, Arthur. Composer and pianist. Born at Killarney, in 1834.

Ondriczek (*on'-dree-chek*), **Franz.** Violinist. Born at Prague, in 1859.

Onslow, George (1784-1853). Composer. Born and died at Clermont-Ferrand. Wrote operas, symphonies, chamber music, etc. His best work is in his chamber music.

Orth, John. Pianist; Bavaria. B. 1850.

Osborne, George Alexander (1806-93). Composer and pianist. Born at Limerick; died in London.

Osgood, Emma A. Soprano; U. S. A. B. 1849.

Osgood, George L. Vocal teacher; U. S. A. B. 1844.

Otto, Ernst J. Composer; Germany. B. 1804; d. 1877.

Otto, Otto (brother of E.). Basso and composer; Germany. B. 1806; d. 1842.

Ouseley, Sir Frederick Arthur Gore (1825-89). Composer and organist. Born in London; died at Hereford. Wrote music when only eight years old. In 1855 succeeded Sir Henry Rowley Bishop as professor of music at Oxford. Wrote a large amount of church music, two oratorios, "Hagar" and "St. Polycarp"; also treatises on "Harmony," "Counterpoint," and other subjects.

P

Pachmann, Vladimir de. Pianist. Born at Odessa, in 1848. Toured Europe and America with great success.

Pacini, G. (*pah-chee'-nee*). Composer; Italy. B. 1796; d. 1867.

Paderewski (*pad-e-ref'-skee*), **Ignace Jan.** Pianist and composer. Born at Podolia, in 1860. One of the greatest pianists that the world has seen, his fame established by tours in both hemispheres. His compositions are chiefly for the piano, but his opera "Manru" has gained for him distinction among composers for the stage.

Paër, Ferdinando (1771-1839). Composer. Born at Parma, Italy; died in Paris. Composed forty-three operas. Was court conductor and composer to Napoleon (1807) and director of the Italian opera in Paris (1812-27).

Paganini (*pah-gah-nee'-nee*), **Nicolo** (1784-1840). Violinist and composer. Born at Genoa; died at Nice. Self taught. For a number of years journeyed about Italy, exciting wonder and astonishment wherever he appeared by his extraordinary performances. In 1828 he extended his travels, making a concert tour through Europe, everywhere creating an unparalleled impression. His immense command of the resources of his instrument, combined with a very remarkable appearance and manner and an inherent love of secrecy and mystery, caused many to regard him as a species of goblin or demon, and books might be filled with the uncanny traditions which have gathered round the memory of this wonderful man. He left behind him a number of compositions for the violin, full of tremendous technical difficulties.

Paine, John Knowles (1839-1906). Composer. Born at Portland, Maine; died at Cambridge. Distinguished American musician. Studied in Berlin, gave organ concerts there and in American cities, and was organist of the West Church, Boston. In 1862 he became teacher of music at Harvard and organist of Appleton Chapel there. Among his works are the oratorios "St. Peter," cantatas, a mass, two symphonies, two symphonic poems, overtures, chamber music, organ and piano pieces, and songs.

Paisiello, G. (*pah-e-se-el'-lo*). Composer; Italy. B. 1741; d. 1816.

Paladilhe, Émile (*pah-lah-deel*). Composer; France. B. 1844.

Palestrina (*pah-les-tree'-na*), **Giovanni Pierluigi da** (1515-94). Composer. Born at Palestrina; died in Rome. Was a singer in the Pontifical Chapel in the time of Julius III, and afterward became composer to the chapel. From 1571 till his death he was maestro di capella of St. Peter's. He is held in reverence as one of the greatest masters, is called "Prince of Music," and from his work a new epoch in musical history may be said to date. Many of his severely grand church compositions are still performed in Rome.

Palmer, H. R. Composer; U. S. A. B. 1834; d. 1907.

Panofka, H. Composer and violinist; Breslau. B. 1807; d. 1887.

Panseron, A. (*pan-seh-rong*). Composer and vocalist; France. B. 1796; d. 1859.

Papini (*pa-pee'-nee*), **Guido.** Composer and violinist. Born at Camagiore, in 1847.

Paradis, Maria T. von (*pa-ra-dees'*). Pianist; Austria. B. 1759; d. 1824.

Paradisi (*pa-ra-dee'-see*), **Pietro Domenico** (1710-92). Composer. Born at Naples; died at Venice.

Parepa-Rosa, Euphrosyne (1836-74). Soprano vocalist. Born in Edinburgh; died in London. Her voice was remarkable for strength and sympathetic quality. Its compass was two and one-half octaves. She married Carl Rosa.

Parish-Alvars, Elias (1808-49). Composer and harpist. Born at Teignmouth; died in Vienna.

Park, John (1804-65). Composer. Born at Greenock; died at St. Andrews. A song-writer of considerable, although uncultivated, ability.

Parker, Horatio William. Composer and teacher. Born at Auburndale, Mass., in 1863. Studied in Boston, under Chadwick and others, and afterward in Munich. Was organist of the Garden City Cathedral, Long Island, and professor of music at the Cathedral School; organist at St. Andrew's, New York, at Holy Trinity, New York, and at Trinity, Boston. In 1894 he became professor of music at Yale University. His works include the fine oratorio "Hora Novissima," cantatas, choruses, orchestral music, anthems, songs, etc.

Parker, J. C. D. Organist and composer; U. S. A. B. 1828.

Parratt, Sir Walter. Composer and organist. Born at Huddersfield, in 1841. One of the foremost organists of his time. Chief professor of the organ at the Royal College of Music, London.

Parry, Sir Charles Hubert Hastings. Composer. Born at Bournemouth, in 1848. Studied under Sir George Elvey, Macfarren, Bennett, and Dannreuther. In 1883 appointed professor of composition in the Royal College of Music. His works include an overture, "Guillem de Cabestanh"; a pianoforte concerto, the choral works "Judith," "Scenes from 'Prometheus Unbound,'" "Blest Pair of Sirens," etc.; also symphonies, chamber music, songs, and pianoforte com-

positions. He has also made several important contributions to musical literature. Became director of the Royal College of Music in 1894, and was knighted in 1898.

Parry, Joseph. Composer. Born at Merthyr-Tydvil, in 1841. Son of a laborer. Won a distinguished place among musicians by his compositions—operas, cantatas, overtures, etc.

Parsons, A. R. Composer and pianist; U. S. A. B. 1847.

Pasdeloup, J. E. (*pah-de-loo'*). Conductor; France. B. 1819; d. 1887.

Pasta, G. Soprano; Italy. B. 1798; d. 1865.

Patey (*pa'-ti*), **Janet Whytock** (1842-94). Contralto vocalist. Born in London; died at Sheffield.

Paton (*pa'-t'n*), **Mary Anne** (1802-64). Soprano vocalist. Born in Edinburgh; died at Chapelthorpe. Appeared in the first productions of Weber's "Freischütz" and "Oberon." Married Lord William Pitt Lennox, and afterward Joseph Wood, the tenor singer.

Patti (*pat'-tee*), **Adelina.** Soprano vocalist. Born at Madrid, in 1843. Daughter of Salvatore Patti, an Italian tenor singer. When very young, came to America with her parents. Appeared in New York in "Lucia di Lammermoor," with immense success, and from that time went on for many years steadily increasing her reputation.

Patti, Carlotta (1840-89). Soprano vocalist. Sister of Adelina Patti. Born in Florence; died in Paris.

Pauer (*pow'-er*), **Ernst.** Composer and pianist. Born in Vienna, in 1826. A pupil of Theodor Dirzka and W. A. Mozart, Jr., for piano, and of Franz Lachner for composition. From 1852 resided in London. Edited the works of classical composers, wrote books on musical subjects, and composed operas, pianoforte pieces, etc. D. 1905.

Peace, Albert Lister. Composer and organist. Born at Huddersfield, in 1844.

Pearsall, Robert Lucas de (1795-1856). Composer. Born at Clifton; died at Wartensee. Wrote a number of well-known madrigals and part-songs.

Pease, Alfred H. Composer and pianist; U. S. A. B. 1842; d. 1882.

Pepusch (*pa'-poosh*), **Johann Christoph** (1667-1752). Composer and organist. Born in Berlin; died in London.

Perabo, Ernst (*pa'-ra-bo*). Pianist and composer; Germany. B. 1845.

Pergolesi (*per-go-la'-see*), **Giovanni Battista** (1710-36). Composer. Born at Jesi, near Ancona; died at Pozzuoli. A student of Naples Conservatorio. Wrote operas, and latterly church music. His best work is the "Stabat Mater," completed a few days before his death.

Peri (*pa'-ree*), **Jacopo** (c. 1560-c. 1630). Composer, vocalist, and lutist. Born and died in Florence. Of noble birth. Composed "Dafne," the first opera ever written, and "Euridice," thereby furnishing models for a new style of stage composition.

Perkins, Charles C. Author, etc.; first president of Boston Handel and Haydn Society; U. S. A. B. 1823; d. 1886.

Perkins, J. E. B. Vocalist; U. S. A. B. 1845; d. 1875.

Perry, Edward Baxter. Blind pianist; U. S. A. B. 1855.

Peschka-Leutner, Minna (*pesh'-ka-loit'-ner*). Soprano; Austria. B. 1839; d. 1890.

Petersilea, Carlyle. Pianist; U. S. A. B. 1848; d. 1903.

Philipp, Isidor E. Pianist; Hungary. B. 1863.

Piatti (*pee-at'-tee*), **Alfredo** (1822-1901). Violoncellist and composer. Born at Bergamo. Studied at Milan. In 1849 appointed solo cellist at the Opera in London. Was long associated with the Monday Popular Concerts.

Piccinni (*pit-chee'-nee*), **Niccolo** (1728-1800). Composer. Born at Bari; died at Passy. Gluck's rival in Paris. A composer of recognized talent, but less important on account of his operas, of which he wrote a great number, than by reason of the controversies in which he figured—especially that in which he was defeated by Gluck, whose methods triumphed over those of his Italian rival.

Piccinni, L. (son of Niccolo). Composer; Italy. B. 1766; d. 1827.

Pierné, H. C. Gabriel (*pyair'-neh*). Composer; France. B. 1863.

Pierson, Henry Hugo (1815-73). Composer. Born at Oxford; died in Leipzig. Settled in Germany. His principal work is the oratorio "Jerusalem," produced at the Norwich Festival of 1852.

Pinsuti, Ciro (*pin-soo'-tee, chee'-ro*). Composer; Italy. B. 1829; d. 1888.

Plaidy (*pli'-dee*), **Louis** (1810-74). Pianist. Born at Wermsdorf; died at Grimma.

Planquette, Robert. Composer. Born in Paris, in 1850. Has written a number of comic operas.

Pleyel, Ignaz Josef (1757-1831). Composer. Born at Ruppertsthal, near Vienna; died in Paris.

Pleyel, Marie F. D. Pianist; France. B. 1811; d. 1875.

Pole, William. Theorist and writer; England. B. 1814; d. 1900.

Polko, Élise. Soprano; Germany. B. 1826; d. 1899.

Pollitzer (*pol'-lits-er*), **Adolphe.** Violinist and composer. Born at Pesth, in 1832.

Ponchielli, A. (*pon-kee-el'-lee*). Composer; Italy. B. 1834; d. 1886.

Poniatowski, Prince J. M. F. X. J. (*pone-ya-tow'-skee*). Composer and tenor; Italy. B. 1816; d. 1873.

Popper, David. Composer and violoncellist. Born at Prague, in 1845. In 1868 became solo violoncellist at the Court Opera in Vienna. After 1873 made many extensive concert tours.

Porpora (*por'-po-ra*), **Niccolo Antonio** (1686-1767). Composer. Born and died in Naples. Eminent as teacher and conductor. Composed many operas.

Potter, Philip Cipriani (1792-1871). Composer and pianist. Born and died in London. Was made principal of the Royal Academy of Music in 1832.

Pougin (*poo-zhan'*), **Arthur.** Violinist and writer. Born at Châteauroux, in 1834.

Powell, Maud. Violinist; U. S. A. B. 1868.

Präger (*pra'-ger*), **Ferdinand** (1815-91). Composer and writer. Born in Leipzig; died in London.

Prelleur, Peter (*prel'-loor*). Composer and organist; England. B. 17—; d. 1758.

Proch, Heinrich (*prokh*). Composer and violinist; Germany. B. 1809; d. 1878.

Proksch, J. (*proksh*). Teacher; Bohemia. B. 1794; d. 1864.

Prout, Ebenezer. Composer and writer. Born at Oundle, Northamptonshire, in 1835. For some years editor of the "Monthly Musical Record," and afterward successively musical critic of the "Academy" and the "Athenæum." Was professor at the Royal Academy of Music, and in Trinity College, Dublin. His compositions include quartets, a quintet, an organ concerto, symphonies, two cantatas—"Hereward" and "Alfred"—and other works.

Prudent, E. B. (*proo-dong*). Composer and pianist; France. B. 1817; d. 1863.

Prume, F. H. (*proom*). Violinist and composer; France. B. 1816; d. 1849.

Puccini, Giacomo (*poo-tschee'-nee*). Composer; Italy. B. 1858.

Puget, Loisa (*poo-zheh'*). Composer; Paris. B. 1810; d. 1890.

Pugno, Raoul (*poo'-nyo*). Pianist; France. B. 1852.

Purcell, Henry (1658-95). Composer and organist. Born and died in Westminster. One of a family of musicians. Educated in the Chapel Royal. Afterward copyist and organist of Westminster Abbey, and later organist of the Chapel Royal. Wrote anthems, etc., while still a choir-boy. Wrote the opera "Dido and Æneas," the music of Dryden's "King Arthur," the operas "Dioclesian," "The Fairy Queen," etc.; incidental music to a number of plays; songs, sonatas, odes and Church music.

Pyne, J. Kendrick. Tenor; England. B. 1785; d. 1857.

Pyne, J. Kendrick 2d (son of 1st). Composer and organist; England. B. 1810; d. 1893.

Pyne, J. Kendrick 3d (son of 2d). Composer and organist; England. B. 1852.

Pyne, Louisa F. Soprano; England. B. 1832.

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Quantz, J. J. Composer and flutist; Germany. B. 1697; d. 1773.

Quidant, Joseph (*kee-dong*). Pianist and composer; France. B. 1815; d. 1893.

Rachmaninoff, Sergei Vassilievitch (*rahch-mahn'-ee-noff*). Pianist and composer; Russia. B. 1873.

Raff, Joseph Joachim (1822-82). Composer; died at Frankfort-on-the-Main. Born at Lachen, on the Lake of Zurich. Was for some years a schoolmaster before devoting himself to music. Wrote five symphonies—chief among them the "Wold" and "Lenore" symphonies—operas, overtures, chamber music, songs, etc.

Rameau (*ra-mo'*), **Jean Philippe** (1683-1764). Composer, organist, and writer. Born at Dijon; died in Paris. An eminent theorist who did much for the science of modern harmony. He composed many operas and ballets.

Ran'degger, A. Composer; Austria. B. 1832.

Rappoldi, E. (*rap-pol'-dee*). Composer and violinist; Austria. B. 1839.

Rappoldi, Laura K. (wife of E.). Pianist; Austria. B. 1853.

Ravenscroft, Thos. Composer; England. B. 1582; d. 1635.

Reeves, John Sims (1822-1900). Tenor vocalist. Born at Shooter's Hill, Kent; died in London. At fourteen became organist of North Cray Church, Kent. Appeared as a singer at Newcastle-on-Tyne Theater in 1839. During 1841-43 was second tenor in Macready's Drury Lane company. Made a successful appearance at Milan as Edgardo, in "Lucia," and on repeating his impersonation of the character at Drury Lane, in 1847, at once established himself as a leading English vocalist, whether in opera, oratorio, or ballad. In 1896 he successfully toured South Africa.

Reger, Max (*ray'-ger*). Composer; Germany. B. 1873.

Reicha (*ri'-kha*), **Anton Joseph** (1770-1836). Composer and writer. Born at Prague; died in Paris.

Reichardt, Alex. Composer and tenor; Germany. B. 1825; d. 1885.

Reichardt, Johann F. Composer and writer; Germany. B. 1752; d. 1814.

Reichardt, Louise (daughter of J.). Composer; Germany. B. 1778; d. 1826.

Reid, John (1721-1807). Military officer and musical amateur. Born at Straloch; died in London. Founded the Reid Chair of Music in Edinburgh University.

Reinecke (*ri'-nek-e*), **Karl.** Composer, pianist, and conductor. Born at Altona, in 1824. In 1860 was appointed conductor at the Gewandhaus, and teacher at the Conservatory, Leipzig. D. 1910.

Reinhold, Hugo. Composer; Austria. B. 1854.

Reinthaler, C. M. (*rein'-tah-ler*). Composer and organist; Saxony. B. 1822; d. 1896.

Reissiger, Karl Gottlieb (1798-1859). Composer, conductor and teacher. Born at Belzig, near Wittenberg. Died at Dresden.

Rellstab, H. F. L. Composer and writer; Germany. B. 1799; d. 1860.

Rellstab, J. C. F. (father of H.). Composer and writer; Germany. B. 1759; d. 1813.

Remenyi (*re-mehn'-yee*), **Eduard** (1830-98). Violinist. Born at Heves, Hungary; died at San Francisco. One of the most noted artists of his time.

Reyer (*re-ya*), **Louis Étienne Ernest.** Composer and writer. Born at Marseilles, in 1823. His works include the operas "Sigurd," "Salammbô," etc.

Rheinberger, J. (*rine'-ber-ger*). Composer and organist; Germany. B. 1839; d. 1901.

Ricci, F. (*rit'-chee*). Composer; Italy. B. 1809; d. 1877.

Ricci, Luigi (brother of F.). Composer; Italy. B. 1805; d. 1859.

Richards, Brinley. Composer and pianist; England. B. 1817; d. 1885.

Richardson, A. Madeley. Organist; England. B. 1868.

Richter (*rikh'-ter*), **Ernst Friedrich Eduard** (1808-79). Composer and writer. Born at Gross-Schönau, Saxony; died at Leipzig. After holding various other appointments, was made cantor of the Thomasschule at Leipzig. Is most widely known as a theorist.

Richter, Hans. Conductor. Born at Raab, in 1843. Conducted the famous Richter concerts in London, the Beyreuth Festivals, etc.

Riego, Teresa del (*ree-ay-go*). Composer; England. B. 18—.

Riemann, Hugo (*ree'-man*). Theorist; Germany. B. 1849.

Ries (*rees*), **Ferdinand** (1784-1838). Composer and pianist. Born at Bonn; died at Frankfort-on-the-Main. A pupil of Beethoven, of whom he wrote an excellent biographical sketch.

Righini, V. (*ree-gee'-nee*). Composer; Italy. B. 1756; d. 1812.

Rimbault (*rim'-bolt*), **Edward Francis** (1816-76). Composer, organist, and writer. Born at Westminster; died in London. A distinguished musical historian and archæologist. Assisted in the formation of the Musical Antiquarian and Percy societies. Edited a great deal of ancient music.

Rimbault, Stephen F. Composer and organist; England. B. 1773; d. 1837.

Rimski-Korsakov, Nikolas A. Composer; Russia. B. 1844; d. 1908.

Rink, J. C. H. Composer; Germany. B. 1770; d. 1846.

Riseley, George. Organist. Born at Bristol, in 1845. Organist of Bristol Cathedral. Conductor of orchestral concerts, and advocate of local orchestras.

Ritter, A. G. Composer and organist; Germany. B. 1811; d. 1885.

Ritter, Fanny Raymond (wife of Frédéric). Writer; U. S. A. B. 1840.

Ritter, Frédéric Louis (1834-91). Composer and writer. Born at Strasburg; died at Antwerp. Came to the United States in 1856; founded the Cecilia and Philharmonic societies, Cincinnati; conducted the Sacred Harmonic and Arion societies in New York, and from 1867 till his death was professor of music at Vassar College.

Ritter, Théodore. Composer and pianist; France. B. 1841; d. 1886.

Rochlitz, F. J. Composer and critic; Germany. B. 1769; d. 1842.

Röckel, Ed. (son of J. A.). Composer and pianist; France. B. 1816; d. 1876.

Röckel, J. A. Tenor; Germany. B. 1783; d. 1870.

Röckel, J. L. (son of J. A.). Composer and pianist; England. B. 1838.

Rockstro, William Smyth (1823-95). Composer and writer. Born at North Cheam, Surrey; died in London. Taught piano and singing and gave lectures. He was a musical biographer and historian of high rank, and as an authority on ecclesiastical music had few superiors.

Rode, J. P. J. Composer, violinist; France. B. 1774; d. 1830.

Romberg, Andreas (1767-1821). Composer and violinist. Born at Vechte; died at Gotha. Wrote operas, symphonies, etc., and won fame by his choral and solo works with orchestra.

Romberg, Bernhard (1767-1841). Composer and cellist. Born at Dinklage; died in Hamburg. Leader among German cellists.

Ronconi, Sebastian (*ron-ko'-nee*). Baritone; Italy. B. 1814.

Röntgen, Julius. Composer and pianist; Germany. B. 1855.

Root, Geo. F. Composer and writer; U. S. A. B. 1820; d. 1895.

Rosa, Carl (1842-89). Violinist. Born in Hamburg; died in Paris. Appeared in public as a violinist when eight years old. Studied at Leipzig and in Paris. Traveled in America as a solo violinist. In 1867 married Euphrosyne Parepa, and organized the Carl Rosa Opera Company, which presented English versions of foreign operas.

Rosellen, Henri (*ro-sel'-len*). Pianist; France. B. 1811; d. 1876.

Rosenhain, Jacob (*ro'-sen-highn*). Composer and pianist; Germany. B. 1813; d. 1894.

Rosenthal, Moritz (*ro-sen-tal*). Pianist; Germany. B. 1862.

Rossini (*ros-see'-nee*), **Gioachino Antonio** (1792-1868). Composer. Born at Pesaro; died in Paris. At seven years of age appeared in Paër's opera "Camilla." When fourteen, became musical director of a traveling company. In 1807 entered the Lyceum at Bologna to study composition. After leaving the Lyceum wrote a great number of more or less successful operas. The production of "Tancredi" in 1813 marks the beginning of Rossini's European reputation. Between 1813 and 1829 he wrote a succession of brilliantly successful operas, finishing his career as an operatic composer in the latter year with "Guillaume Tell," his best work. After 1829 the only composition he produced was his "Stabat Mater."

Rouget de Lisle (*roo-zha' dŭ leel*), **Claude Joseph** (1760-1836). Born at Montaigu, Lons-le-Saulnier, France; died at Choisy-le-Roi. An officer of Engineers and composer of songs. Famous as the author of the "Marseillaise."

Rousseau (*roos-so'*), **Jean Jacques** (1712-78). Composer and writer. Born at Geneva; died at Ermenonville, near Paris.

Rowbotham, John Frederick. Musical writer. Born at Bradford, England, in 1859. Author of valuable musical histories and biographies.

Roze, Marie. Soprano vocalist. Born at Paris, in 1848. Made successful tours in Europe and America. Settled in England. In 1874 she married Julius Parkins, and in 1877 Henry Mapleson.

Rubini, G. B. (*roo-bee'-nee*). Tenor; Italy. B. 1795; d. 1854.

Rubinstein, Anton (1830-94). Composer and pianist. Born near Jassy, Rumania; died in St. Petersburg. Made a number of highly successful concert tours, visiting the United States in 1872. Became director of the St. Petersburg Conservatorium, which he founded in 1862. As a pianist, can be considered as second only to Liszt. He wrote symphonies —the "Ocean" and "Dramatic Symphony"—operas, chamber music, etc.

Rubinstein, Nikolai (1835-81). Composer and pianist, brother of Anton. Born in Moscow; died in Paris. Director of the Conservatorium there. An excellent musician, but owing to his dislike to concert tours, little known outside of Russia.

Rudersdorff, H. Soprano; Russia. B. 1822; d. 1882.

Rudorff, Ernst F. Composer and pianist; Germany. B. 1840.

Ruggieri, F. (*rood-jee-eh'-ree*). Violin-maker; Italy. B. 16—; d. 17—.

Rummel, Franz (1853-1901). Pianist and teacher. Born and died in London. Toured America three times.

Russell, Ella. Soprano; U. S. A. B. 1862.

Russell, Henry (1813-1900). Composer and barytone vocalist. Born at Sheerness; died in London. He composed about 800 songs, among which are "Cheer, Boys, Cheer," "A Life on the Ocean Wave," "Woodman, Spare that Tree," etc.

Rust, Friedrich Wilhelm (1739-96). Composer. Born at Wörlitz; died at Dessau.

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Sacchini, A. M. L. (*sak-kee'-nee*). Composer; Italy. B. 1734; d. 1786.

Sachs (*zakhs*), **Hans** (1494-1576). Poet and composer. Born and died in Nuremberg. Most famous of the meistersingers.

Safonoff, Wassili. Conductor; Russia. B. 1852.

Sainton (*san-tong*), **Prosper Philippe** (1813-90). Violinist and composer. Born at Toulouse; died in London. Studied at the Paris Conservatoire under Habeneck. After an extensive European concert tour settled in England, and in 1845 was made professor of the violin at the Royal Academy of Music.

Sainton-Dolby, Charlotte Helen (1821-85). Contralto vocalist and composer. Born and died in London. For a number of years principal English contralto vocalist. Made several concert tours on the Continent. As a mark of his appreciation of her singing in "St. Paul," Mendelssohn dedicated six songs (Op. 57) to her.

Saint-Saëns (*sangt-sah-ong*), **Charles Camille.** Composer, organist, and pianist. Born in Paris, in 1835. Evinced promise of great musical talent at an early age, and rapidly acquired a reputation as a clever pianist and organist. Among his operas are "Samson et Delila," "Étienne Marcel," "Henry VIII," "Ascanio," etc. His other works include symphonies, orchestral suites, symphonic poems, concertos, chamber music, etc. Since the death of Gounod, Saint-Saëns ranks as the foremost of recent French musicians.

Salaman, Ch. K. Composer and pianist; England. B. 1814; d. 1901.

Salieri (*sal-yeh'-ree*), **Antonio** (1750-1825). Composer. Born at Legnano; died at Vienna. Wrote operas, Church music, chamber music, etc.

Salo, Gasparo da. Violin-maker; Italy. B. 1542; d. 1609.

Salomon, Johann Peter (1745-1815). Composer and violinist. Born at Bonn; died in London. It was Salomon who induced Haydn to visit England.

Sankey, Ira David (1840-1908). Composer and singer. Born at Edinburgh, Pa.; died in Brooklyn. Evangelist, long associated with Dwight L. Moody.

Santley, Charles. Composer and barytone vocalist. Born in Liverpool, in 1834.

Sapellnikoff (*sa-pel'-nee-kof*), **Wassily.** Pianist. Born at Odessa, in 1867.

Sarasate (*sah-rah-sah'-teh*), **Pablo de.** Violinist and composer. Born at Pamplona, in 1844.

Sarti (*sar'-tee*), **Giuseppe** (1729-1802). Composer and organist. Born at Faenza; died in Berlin. Wrote 30 operas and much Church music.

Satter, Gustav. Composer; Austria. B. 1832; d. 18—.

Sauret (*saw-ray'*), **Émile.** Composer and violinist. Born at Dun-le-Roi, in 1852. Studied at the Paris Conservatoire, also at Brussels, under Bériot. One of the principal contemporary violin virtuosi.

Sax, Antoine J. With his father, inventor of saxhorns, saxaphones, etc.; France. B. 1814; d. 1894.

Sax, Charles J. (father of A. J.). With his son, inventor of saxhorns, saxophones, etc.; France. B. 1791; d. 1865.

Sbriglia, Giovanni. Tenor singer and teacher; Italy. B. 1840.

Scalchi, Sofia (*skal'-kee*). Alto; Italy. B. 1850.

Scarlatti (*skar-lat'-tee*), **Alessandro** (1659-1725). Composer. Born at Trapani; died at Naples. The father of Italian opera.

Scarlatti, Domenico (1683-1757). Composer and harpsichordist. Born at Naples; died at Madrid. Developed principles of piano technique.

Scarlatti, Giuseppi, son of Domenico. Composer; Italy. B. 1712; d. 1777.

Schad, Jos. Composer and pianist; Germany. B. 1812; d. 1879.

Scharwenka (*shar-ven'-ka*), **Philipp.** Composer and pianist. Born at Samter, Posen, in 1847. Founder, with his brother Xaver, of the Scharwenka Conservatory in Berlin.

Scharwenka, Xaver. Composer and pianist, brother of Philipp. Born at Samter, in 1850. Beginning in 1874, he toured Europe and America. In 1891, ten years after the establishment of his conservatory in Berlin, he came to New York and founded a conservatory there. He returned to Germany in 1898.

Schauroth, Adolphine von (*show'-rote*). Pianist; Germany. B. 1814.

Schikaneder, J. E. (*shee'-ka-na-der*). Basso; Germany. B. 1751; d. 1812.

Schilling, Gustav (*shil'-ling*). Writer; Germany. B. 1805; d. 1880.

Schindler (*shint'ler*), **Anton** (1796-1864). Violinist and conductor. Biographer of Beethoven. Born at Modl; died at Bockenheim.

Schmidt, Aloys. Composer and pianist; Germany. B. 1789; d. 1866.

Schneider, Fr. J. C. Composer and organist, writer; Germany. B. 1786; d. 1853.

Schneider, J. G. Composer and organist; Germany. B. 1789; d. 1864.

Schneider, Wilhelm. Composer and organist; Germany. B. 1783; d. 1843.

Schnyder von Wartensee, Xaver (*shnee'-der fon var'-ten-zeh*). Composer and writer; Switzerland. B. 1786; d. 1868.

Schoberlechner (*sho'-ber-lech-ner*). Composer and pianist; Austria. B. 1797; d. 1843.

Schradieck, Henry (*shrah'-deek*). Violinist; Germany. B. 1846.

Schröder, Karl (*shra'-der*). Cellist; Germany. B. 1848.

Schröder-Devrient, Wilhelmine. Soprano; Germany. B. 1804; d. 1860.

Schubert, Franz (1797-1828). Composer. Born and died in Vienna. When eleven years old entered the Imperial Convict (free school) at Vienna as a choir-boy, and also played the violin in the school orchestra. In 1813 he left the school and devoted himself to the study of music at home. Later he was for two years singing and pianoforte master in the house of Count Esterhazy, and thereafter spent the remainder of his life principally in Vienna. One of the greatest and most fertile of musical composers. Wrote some 15 operas and operettas, 5 masses and other Church music, 9 symphonies, 15 string quartets, besides other chamber and pianoforte music, and 600 songs. Perhaps the most lyrical of all composers, he lived almost wholly unappreciated, and died almost in want.

Schuberth, Carl. Composer and cellist; Germany. B. 1811; d. 1863.

Schulhoff, Julius (*shool'-hof*). Composer and pianist; Bohemia. B. 1825; d. 1898.

Schumann, Clara (1819-96). Composer and pianist. Born at Leipzig; died at Frankfort-on-the-Main. A pupil of her father, Friedrich Wieck. Made a tour as a pianoforte virtuosa in her eleventh year. Later, was the first to introduce Chopin's music to the German public. In 1840 married Robert Schumann.

Schumann, Robert Alexander (1810-56). Composer and pianist. Born at Zwickau; died at Endenich, near Bonn. Originally a law student, but interested himself solely in music, and soon adopted it as his profession. An injury to one of his fingers, the result of too severe practice, obliged him to abandon the pianoforte for composition, upon which he concentrated all his energy with magnificent results. Instituted the "Neue Zeitschrift für Musik" in 1834. In 1844 went to Dresden as conductor of the Choral Union, and in 1850 removed to Düsseldorf. Here, however, a long-standing affection of the brain became rapidly worse, and in 1854 Schumann had to be placed in an asylum, where he died. Schumann wrote choral works—"Paradise and the Peri," "Pilgrimage of the Rose," "Faust,"—the opera "Genoveva," symphonies, chamber music, pianoforte compositions, and a large number of vocal works, all marked by great depth and sincerity of design and a wonderful grasp of a wide range of expression and sentiment.

Schumann-Heink, Ernestine. Operatic contralto. Germany. B. 1861.

Schuppanzigh, Ignaz (*shup'-pan-tzigh*). Violinist; Austria. B. 1776; d. 1830.

Schütt, Ed. Pianist; Russia. B. 1856.

Schytte, Ludwig T. (*sheet'-teh*). Pianist and composer; Denmark. B. 1850; d. 1909.

Scotti, Antonio. Vocalist; Italy. B. 1867.

Scriabine, Alexander (*skree'-a-bee-neh*). Pianist; Russia. B. 1872.

Sechter, Simon (*sekh'-ter*). Composer and organist; Germany. B. 1788; d. 1867.

Seeling, Hans. Pianist and composer; Bohemia. B. 1828; d. 1862.

Seguin, A. E. S. (*seg'-win*). Basso; England. B. 1809; d. 1852.

Seguin, Ann Childe (wife of A. E. S.). Soprano; England. B. 18—; d. 1888.

Seguin, W. H. (brother of A. E. S.). Basso; England. B. 1814; d. 1850.

Seidl, Anton. Conductor; Hungary. B. 1850; d. 1898.

Sembrich, Marcella. Soprano; Germany. B. 1858.

Servais (*ser-va*), **Adrien François** (1807-66). Composer and violoncellist. Born and died at Hal, near Brussels. Traveled as a virtuoso, and in 1848 became teacher of his instrument in the Brussels Conservatoire.

Servais, Joseph. Composer and cellist; France. B. 1850; d. 1885.

Severn, Thomas Henry (1801-81). Composer and organist. Born in London; died at Wandsworth.

Seyfried, J. X. Ritter von (*zi'-freet*). Composer; Austria. B. 1776; d. 1841.

Sgambati (*sgam-bah'-tee*), **Giovanni.** Composer and pianist. Born in Rome, in 1843. His works include chamber and pianoforte music, symphonies, etc.

Shakespeare, William. Composer and tenor vocalist. Born at Croydon, in 1849. A singing-teacher of high repute. His compositions include overtures, a pianoforte concerto, symphony, etc.

Sherrington, H. Lemmens. Soprano; England. B. 1834.

Sherwood, Wm. H. Pianist; U. S. A. B. 1854; d. 1911.

Shield, William (1748-1829). Composer and violinist. Born at Swalwell; died in London. Composed the music of a number of ballad operas once highly popular.

Sibelius, Jean (*see-beh'-lee-oos*). Composer; Finland. B. 1865.

Silbermann, Gottfried (*zeel'-ber-man*). Pianoforte-maker; Germany. B. 1683; d. 1753.

Silcher, Friedrich (*zil'-kher*). Composer and writer; Germany. B. 1789; d. 1860.

Siloti, Alexander (*see-lo'-tee*). Pianist; Russia. B. 1863.

Sinding, Christian (*zint'-ing*). Composer; Norway. B. 1856.

Singelée (*sangzh-la*), **Jean Baptiste** (1812-75). Composer and violinist. Born at Brussels; died at Ostend.

Singer, Otto. Composer; Germany. B. 1833; d. 1894.

Sitt (*zit*), **Hans.** Composer and violinist. Born at Prague, in 1850.

Sivori (*see-vo'-ree*), **Ernesto Camillo** (1815-94). Composer and violinist. Born and died at Genoa. A pupil of Paganini.

Sloper, Lindsay (1826-87). Composer and pianist. Born and died in London.

Smart, Sir George Thomas (1776-1867). Composer and organist. Born and died in London.

Smart, Henry (1813-79). Composer and organist. Born and died in London. Wrote excellent part-songs.

Smetana (*sme-tah'-nah*), **Friedrich** (1824-84). Composer. Born at Leitomischl, Bohemia; died at Prague. Wrote a number of orchestral works, strongly reflecting the national spirit of the Bohemians; also operas—"Die Brandenburger in Böhmen," "Dalibor," "Der Kufz," and "Die Verkaufte Braut."

Smith, Gerrit. Organist; U. S. A. B. 1859.

Smith, Sydney (1839-89). Composer and pianist. Born at Dorchester; died in London. Wrote a great number of popular pianoforte pieces.

Smith, Wilson G. Composer; U. S. A. B. 1855.

Södermann, J. A. (*sood'-er-man*). Composer; Sweden. B. 1832; d. 1876.

Sonnleithner, Ch. (*son'-light-ner*). Composer; Austria. B. 1734; d. 1786.

Sontag, Henrietta G. W. Soprano; Germany. B. 1806; d. 1854.

Sousa, John Philip. Bandmaster and composer; U. S. A. B. 1854.

Spagnoletti, P. (*span-yo-let'-tee*). Cellist; Italy. B. 1768; d. 1834.

Speidel, William. Composer and pianist; Germany. B. 1826; d. 1899.

Spenser, Willard. Composer; U. S. A. B. 1856.

Spindler, Fritz (*shpint'ler*). Composer and pianist; Germany. B. 1817; d. 1906.

Spitta (*shpit'-ta*), **Julius August Philipp** (1841-94). Writer. Born at Wechold; died in Berlin. Author of a standard life of Johann Sebastian Bach.

Spofforth, R. Composer; England. B. 1768; d. 1827.

Spohr (*shpor*), **Louis** (1784-1859). Composer, violinist, and conductor. Born at Brunswick; died at Cassel. Acquired his remarkable knowledge of harmony and counterpoint almost entirely by his own unaided exertions. Made many concert tours, and soon became recognized as the first of living violinists. After holding various other appointments, was made court kapellmeister at Cassel in 1822. Here he wrote his best works, the opera "Jessonda" and the oratorio "Die letzten Dinge" (The Last Judgment). Spohr wrote 8 operas, 5 oratorios, 9 symphonies, 43 quartets, 5 quintets, 5 double quartets, also the famous duets for two violins, violin concertos, many songs, etc. As a composer his work is lyrical, refined, and delicate. Musical art is most deeply indebted to him, however, as the virtual founder of the modern school of violin-playing.

Spontini (*spon-tee'-nee*), **Gasparo Luigi Pacifico** (1774-1851). Composer. Born and died at Majolati, Ancona. Studied at Naples. Wrote operas of a grandly spectacular kind, modeled somewhat on those of Gluck. His best works are "La Vestale" and "Ferdinand Cortez." Was for some time general director of music at Berlin.

Stainer, Sir John (1840-1901). Composer and organist. Born in London; died at Verona. Appointed organist to St. Michael's College, Tenbury, in 1857, and to Magdalen College, Oxford, in 1860. In 1872 became organist of St. Paul's Cathedral. Was juror in music, for England and the colonies, at the Paris Exhibition of 1878. In 1883 succeeded Hullah as inspector of training colleges (music). In 1888 he was knighted, and in the following year became professor of music at Oxford. He wrote the sacred cantatas "The Daughter of Jairus" and "St. Mary Magdalen," anthems, etc., and numerous theoretical treatises and text-books which are among the most valuable works of the kind in English.

Stanford, Sir Charles Villiers. Composer and organist. Born in Dublin, in 1852. Studied music under Sir Robert Stewart, and Michael Quarry at Dublin, under Reinecke at Leipzig, and Kiel at Berlin. Was appointed organist of Trinity College, Cambridge, and conductor of Cambridge University Musical Society, in 1872. In 1883 was appointed professor of composition, and conductor of the orchestral class at the Royal College of Music. Among his works are two operas—"The Veiled Prophet," and "Savonarola"—two symphonies, cantatas—"Battle of the Baltic" and "The Revenge"—chamber music, songs, etc.

Staudigl, Jos. (*stow'-digl*). Basso; Germany. B. 1807; d. 1861.

Staudigl, Jos. (son of J.). Barytone. B. 1850.

Stavenhagen, B. Pianist; Reuss. B. 1862.

Steffani, A. (*stef-fah'-nee*). Composer; Italy. B. 1655; d. 1730.

Steggall, Ch. Composer and organist; England. B. 1826; d. 1905.

Steibelt, Dan. Composer and pianist; Germany. B. 1764; d. 1823.

Stephens, Catherine (1791-1882). Soprano vocalist. Born and died in London. Known as "Kitty Stephens." Made an enormous success as Polly in "The Beggar's Opera." Afterward Countess of Essex.

Sterkel, J. F. X. Composer; Germany. B. 1750; d. 1817.

Sterling, Antoinette. Contralto vocalist. Born at Sterlingville, N. Y., in 1850. After singing in this country for a time, in 1873 she settled in London, where she became popular in oratorio and as a ballad-singer, leading composers writing for her songs that have become famous. D. 1904.

Sternberg, C. Composer and pianist; Russia. B. 1852.

Stewart, Sir Robert Prescott (1825-94). Composer and organist. Born and died in Dublin. Professor of music in Trinity College, Dublin.

Stigelli, G. (*stee-jel'-lee*). Composer and tenor; Germany. B. 1819; d. 1868.

Stockhausen, M. Soprano; Germany. B. 1803; d. 1877.

Storace, Stephen (1763-96). Composer. Born and died in London. Produced many works for the stage.

Stradella, A. Composer; Italy. B. 1645; d. 1681.

Stradivari, A. (*strah-dee-vah'-ree*). Violin-maker; Italy. B. 1644; d. 1737.

Stradivari, F. Violin-maker; Italy. B. 1670; d. 1743.

Stradivari, O. Violin-maker; Italy. B. 1679; d. 1742.

Strakosch, Max (1835-92). Impresario, brother of Moritz Strakosch. Died in New York.

Strakosch, Moritz (1825-87). Composer and pianist. Born at Lemberg; died in Paris. A well-known impressario. Teacher of Adelina Patti and husband of her sister Amalia. He introduced many famous musicians to the American public.

Strauss, Eduard. Composer; Austria. B. 1835.

Strauss, Johann (1804-49). Composer. Born and died in Vienna. The head of the celebrated Strauss family, whose matchless dance music has charmed the world.

Strauss, Johann. Composer; Austria. B. 1825; d. 1899.

Strauss, Joseph. Composer; Austria. B. 1827; d. 1870.

Strauss, Ludwig. Violinist; Austria. B. 1835.

Strauss, Richard. Composer. Born in Munich, in 1864. He was kapellmeister at Munich (1886-89; 1895-98), Weimar (1889-95), and Berlin (1898-). His later works, such as the tone-poems "Ein Heldenleben" and "Also sprach Zarathustra," and the operas "Salome" and "Elektra," have by their innovations aroused much musical discussion.

Streabbog. Pseudonym of J. L. Gobbaerts.

Strelezki, Anton (*stre-let'-shkee*) (pseudonym of an English writer). Pianist and composer. B. 1859.

Sullivan, Sir Arthur Seymour (1842-1900). Composer. Born and died in London. A choir-boy at the Chapel Royal. When fourteen won the Mendelssohn Scholarship. Studied under Bennett and Goss, and afterward spent three years at Leipzig. Attracted great attention, shortly after his return from Leipzig, by his music to "The Tempest." Achieved a world-wide success with his comic operas. Also wrote the cantata "Kenilworth," the oratorios "The Prodigal Son," "The Martyr of Antioch," and "The Golden Legend"; a festival "Te Deum"; overtures, a symphony, songs, etc.

Suppé (*soop-pa'*), **Franz von.** Composer. Born at Spalatro, in 1820. Died 1895.

Sussmayer, F. X. (*zus'-mi-er*). Composer; Austria. B. 1766; d. 1803.

Svendsen (*svent'-zen*), **Johann Severin.** Composer. Born at Christiania, in 1840. Served for six years in the Norwegian army, meanwhile studying music during his leisure time. Joined a band of itinerant musicians, as a violinist. Afterward entered Leipzig Conservatory, where he studied composition. His works include a symphony, some clever chamber music, etc. D. 1911.

Svendsen, Oluf (*svent'-zen*). Flutist; Sweden. B. 1832; d. 1888.

Sweelenck (*sveh'-link*). Composer and organist; Holland. B. 1562; d. 1621.

Szumowska, Antoinette (*shoo-mof'-shka*). Pianist; Poland. B. 1868. Wife of Josef Adamowski, cellist.

T

Tadolini, G. (*tah-do-lee'-nee*). Composer; Italy. B. 1793; d. 1872.

Talexy, A. (*tah'-lex-ee*). Composer and pianist; France. B. 1820; d. 1881.

Tamberlik, Enrico. Tenor; Italy. B. 1820; d. 1889.

Tamburini, A. (*tam-boo-ree'-nee*). Barytone; Italy. B. 1800; d. 1876.

Tansur, Will. Composer and organist; England. B. 1706; d. 1783.

Tartini (*tar-tee'-nee*), **Giuseppe** (1692-1770). Composer and violinist. Born at Pirano, Istria; died at Padua. In 1728 founded his famous violin school at Padua. He published various treatises as well as numerous compositions.

Taubert, Karl Gottfried Wilhelm (1811-91). Composer and pianist. Born and died in Berlin.

Tausig, Karl (1841-71). Composer and pianist. Born at Warsaw; died at Leipzig. Liszt's greatest pupil.

Taylor, Franklin. Pianist and writer. Born at Birmingham, in 1843. Studied at Leipzig. Edited English translations of E. F. Richter's theoretical works.

Tchaikovsky (*chi-kof'-ski*), **Peter Ilyitch** (1840-93). Composer. Born at Votinsk; died in St. Petersburg. Studied at the St. Petersburg Conservatory, and also in Germany. Was for twelve years professor of the theory of music at the Moscow Conservatory. Wrote symphonies, operas, orchestral music, songs, etc.

Telemann, G. P. (*teh'-leh-man*). Composer and organist; Germany. B. 1681; d. 1767.

Templeton, John (1802-86). Tenor vocalist. Born at Riccarton; died at New Hampton.

Ternina, Milka. Soprano; Croatia. B. 1864.

Terschak, Ad. Composer and flutist; Bohemia. B. 1832; d. 1901.

Thalberg (*tal'-berkh*), **Sigismund** (1812-71). Composer and pianist. Born at Geneva; died at Naples. A pupil of Hummel. Famous for his mastery of the singing tone and legato effects on the piano.

Thayer, Alexander Wheelock (1817-97). Writer. Born at South Natick, Mass; died at Triest. Author of a very elaborate though unfinished life of Beethoven.

Thayer, Eugene. Organist and composer; U. S. A. B. 1838; d. 1889.

Thomas, Arthur Goring (1851-92). Composer. Born at Ralton; died in London.

Thomas (*to-mah'*), **Charles Ambroise** (1811-96). Composer. Born at Metz; died in Paris. Studied at the Paris Conservatoire. Wrote operas—"Mignon," "Hamlet," etc. Church music, chamber music, pianoforte pieces, and other works.

Thomas, Theodore (1835-1905). Orchestral conductor. Born at Esens, East Friesland; died in Chicago. Played the violin in public at six. Was brought to New York in 1845, and became member of the orchestra of the Italian opera. Toured as soloist with Jenny Lind and others. In 1864 he organized "Symphony Soirées," which he conducted till 1869. In 1878 became president of the Cincinnati College of Music, in 1880 conductor of the New York Philaharmonic Orchestra, and from 1888 was director of the Chicago Conservatory. As conductor of the Chicago Orchestra, organized in 1891, he increased his reputation and influence.

Thomé (*to-ma'*), **François Luc Joseph.** Composer. Born in Mauritius, in 1850; d. 1909.

Thorndike, Herbert Elliot. Barytone vocalist. Born in Liverpool, in 1851.

Thunder, Henry. Organist, composer; Ireland. B. 1832; d. 1881.

Thursby, Emma. Soprano; U. S. A. B. 1857.

Tietjens (*teet'-yens*), **Teresa** (1831-77). Soprano vocalist. Born at Hamburg; died in London.

Tomaschek, W. Composer; pianist; Bohemia. B. 1774; d. 1850.

Tosti (*tos'-tee*), **Francesco Paolo.** Composer. Born at Ortona, in 1846.

Tourjée (*toor-zha*), **Eben.** Teacher; U. S. A. B. 1834; d. 1890. Founder of New England Conservatory.

Tours (*toors*), **Berthold** (1838-97). Composer and violinist. Born at Rotterdam; died in London.

Tourte, F. (*toort*). Violin-bow maker; France. B. 1747; d. 1835.

Trebelli, Zelia (1838-92). Contralto vocalist. Born in Paris; died at Étretat.

Tuckerman, S. P. Composer and organist; U. S. A. B. 1819. d. 1890.

Tully, James Howard (1815-68). Composer. Born and died in London.

Turini, Fr. (*too-ree'-nee*). Composer; Bohemia. B. 1590; d. 1656.

Turpin, Edmund Hart. Composer and organist. Born at Nottingham, in 1835.

U V

Ulibishev, Alex. von (*oo-le'-bi-shef*). Writer; Germany. B. 1795; d. 1856.

Ulrich (*ool'-rikh*), **Hugo.** Composer; Silesia. B. 1827; d. 1872.

Unger (*oong'-er*), **Caroline** (1805-77). Contralto vocalist. Born at Stuhlweissenburg; died in Florence.

Urspruch, Anton (*oor'-sprookh*). Pianist and composer. B. 1850.

Vaccaj, N. (*vak-kah'-ee*). Composer; Italy. B. 1790; d. 1848.

Valleria, Alwina Lohmann. Soprano vocalist. Born at Baltimore, in 1848.

Van der Stucken, Frank. Composer; U. S. A. B. 1858.

Veracini (*veh-rah-chee'-nee*), **Francesco** (1685-1750). Composer and violinist. Born at Florence; died at Pisa.

Verdi (*vehr'-dee*), **Giuseppe** (1813-1901). Composer. Born at Roncole, in the duchy of Parma; died in Milan. Studied at Milan. Gained a great reputation by his operas "Ernani," "Rigoletto," "Trovatore," "Traviata," "Aïda," "Otello," "Falstaff," etc., which have enjoyed an immense vogue all over the world. Verdi ranks as the greatest modern Italian composer, and one of the most prominent musicians of the last century. His latest success is the opera "Falstaff," 1893.

Veron (*veh-rong*), **Louis Désiré** (1798-1867). Writer. Born and died in Paris.

Vestris, L. E. Alto; England. B. 1797; 1856.

Viadana, L. (*vee-ah-dah'-nah*). Composer; Italy. B. 1565; d. 1645.

Vianesi (*vee-a-na'-zee*), **Auguste Charles.** Conductor. Born at Leghorn, in 1837.

Viardot-Garcia (*vyar-do'-gar-thee'-a*), **Pauline** (1831-1910). Composer and mezzo soprano vocalist. Born and died in Paris. Studied the piano under Liszt, but afterward devoted herself to singing. Achieved a brilliant success at the Italian opera in London and Paris, made many tours, retired in 1863, and lived in Paris as a teacher.

Vieuxtemps (*v'yu-tahng'*), **Henri** (1820-81). Composer and violinist. Born at Verviers, Belgium; died in Algeria. A pupil of Bériot. Made extensive concert tours. From 1846 to 1852 lived at St. Petersburg as court violinist. Made successful tours in Europe and America. Wrote four violin concertos, also a number of lesser compositions of a brilliant and highly effective kind.

Vilbac, A. C. R. Composer and pianist; France. B. 1829; d. 1884.

Villaume, J. B. (*vee-yome*). Violin-maker; France. B. 1798; d. 1875.

Villaume, N. (nephew of J. B.). Violin-maker; France. B. 1800; d. 1871.

Villaume, N. F. (nephew of J. B.). Violin-maker; France. B. 1812; d. 1876.

Villaume, S. (nephew of J. B.). Violin-maker; France. B. 1835; d. 1875.

Viotti (*vee-ot'-tee*), **Giovanni Battista** (1753-1824). Composer and violinist. Born at Fontanetto, in Piedmont; died in London. The son of a blacksmith. Studied at Turin. Made many concert tours. Wrote twenty-nine concertos, also duets, quartets, sonatas, etc. Spent the latter part of his life in London.

Vivaldi (*vee-val'-dee*), **Antonio** (1670-1743). Composer and violinist. Born and died in Venice.

Vivier, E. L. (*vee-vee-eh*). Horn-player; Corsica. B. 1821.

Vogl, Heinrich. Tenor; Bavaria. B. 1845.

Vogl, J. M. Barytone. B. 1768; d. 1840.

Vogl, Theresa (wife of H.). Soprano. B. 1846.

Vogler, Abbé G. J. Composer and organist, writer; Germany. B. 1749; d. 1814.

Volckmar, Wil. (*folk'-mar*). Composer and organist; Germany. B. 1812; d. 1887.

Volkmann, F. R. (*folk'-man*). Composer; Bohemia. B. 1815; d. 1883.

Voss, Carl. Pianist; Poland. B. 1815; d. 1882.

W

Wachtel, Theodor (*vakh'-tel*). Tenor; Germany. B. 1823; d. 1895.

Wagner (*vakh'-ner*), **Richard** (1813-83). Composer and writer. Born at Leipzig; died in Venice. While studying at the University of Leipzig also worked at music. After producing an overture and a symphony, which were successfully performed at the Gewandhaus, he wrote an opera, "Die Feen." In 1836 he conducted a performance of his next opera, "Das Liebesverbot," at Magdeburg, where he was musical director of the theater. After a short time spent at Königsburg and Riga, Wagner went to Paris, in the hope that he might get an opera produced there. In Paris he completed "Rienzi" and "The Flying Dutchman." Although unsuccessful in Paris, he met with good fortune in Dresden, where a performance of "Rienzi," in 1842, resulted in his appointment as Kapellmeister. In 1845 he produced "Tannhauser," and also wrote "Lohengrin." Becoming involved in the revolution at Dresden in 1849, he was obliged to take refuge in Weimar, and afterward in Paris, whence he went to Zurich. At Zurich he projected the great "Nibelungen" cycle of operas, and also "Tristan und Isolde." Amnestied, and after an extensive musical tour, Wagner went to Munich, where "Tristan und Isolde" and "Die Meistersinger" were produced, in 1868. The crowning point in Wagner's life, however, was the performance of the "Nibelungen" cycle at Bayreuth, in 1876. "Parsifal" appeared in 1882. No musical genius has ever achieved greater fame, and none, perhaps, has exerted a greater influence upon the development of music than Wagner.

Wagner, Siegfried (son of R.). Composer; Switzerland. B. 1869.

Wagenseil, G. C. (*vah'-gen-sile*). Composer and pianist; Austria. B. 1715; d. 1777.

Wallace, William Vincent (1814-65). Composer, pianist, and violinist. Born at Waterford, Ireland; died at the Château de Bages, France. Traveled all over the world, giving concerts. In 1845 returned to England, and produced his famous opera "Maritana," following it up with "Lurline," "The Amber Witch," "The Desert Flower," etc.

Warnots (*var-no*), **Elly.** Soprano vocalist. Born at Liège in 1862.

Warren, S. P. Composer, organist and pianist; Canada. B. 1841.

Watson, William Michael (1840-89). Composer. Born at Newcastle-on-Tyne; died at East Dulwich.

Webbe, Samuel. Composer and organist; Minorca. B. 1740; d. 1816.

Webbe, Samuel (son of preceding). Composer and organist; England. B. 1770; d. 1843.

Weber, Aloysia (*veh'-ber*). Soprano; Germany. B. 1750; d. 1839.

Weber, Gottfried (1779-1839). Writer. Born near Mannheim; died at Kreuznach.

Weber, Karl Maria von (1786-1826). Composer. Born at Eutin, Oldenburg; died in London. In 1800 his first opera, "Das Waldmädchen," was performed at Chemnitz. In 1804 he went to Breslau, where he commenced an opera, entitled "Rübezahl," the overture to which figures in programmes as "Ruler of the Spirits." After a very unsettled life, he at length achieved a decided success at Leipzig as pianist and composer, and was made conductor of the opera at Prague. Later he settled in Dresden. In Dresden he wrote the operas "Preciosa," "Freischütz," "Euryanthe," and "Oberon," which have made his name famous. He also wrote church and chamber music. To London, where he died, he had gone to superintend the production of "Oberon."

Wehle, Carl (*veh'-leh*). Pianist; Bohemia. B. 1825; d. 1887.

Weigl, Joseph (*vikh'-'l*). Composer; Austria. B. 1766; d. 1846.

Weigl, Thad. (brother of J.). Composer; Germany. B. 1777; d. 182—.

Weitzmann, C. F. (*vites'-man*). Theorist; Germany. B. 1808; d. 1880.

Wesley, S. S. Composer and organist; England. B. 1810; d. 1876.

White, Maude Valérie. Composer. Born at Dieppe, in 1855.

Whiting, Geo. E. Composer and organist; U. S. A. B. 1842.

Widor, Ch. M. (*vee-dor*). Composer and organist; France. B. 1844.

Wieck (*veek*), **Friedrich.** Pianist and writer; Germany. B. 1785; d. 1875.

Wieniawski (*v'ya-nee-of'-skee*), **Henri** (1835-80). Composer and violinist. Born at Lublin, Poland; died in Moscow. Studied at the Paris Conservatoire. Made frequent concert tours in Europe and America.

Wilhelmj (*veel-hel'-mi*), **August.** Composer and violinist. Born at Usingen, Nassau, in 1845. Studied at Leipzig under Ferdinand David. His work in the development of orchestral music and the management of concerts entitles him to much credit. His tours brought him success. D. 1908.

Willaert, Adrien. Composer; Belgium. B. 1490; d. 1562.

Willmers, H. Rudolf (*vil'-mers*). Composer and pianist; Germany. B. 1821; d. 1878.

Wilson, John (1800-49). Tenor vocalist. Born in Edinburgh; died in Quebec.

Wingham, Thomas (1846-93). Composer. Born and died in London.

Winter, Peter von (1754-1825). Composer. Born at Mannheim; died at Munich.

Woelfl, Jos. (*velfl*). Pianist and composer; Austria. B. 1772; d. 1814.

Wollenhaupt, H. A. (*vol'-len-howpt*). Composer and pianist; Germany. B. 1827; d. 1863.

Wotton, William Bale. Bassoon-player. Born at Torquay, in 1832.

Wraniczky, Paul (*rah-nit'-skee*). Composer; Moravia. B. 1756; d. 1808.

Wylde, Henry (1822-90). Composer and writer. Born in Hertfordshire; died in London.

Y Z

Yriarte, S. (*e-ree-ar'-teh*). Writer; Teneriffe. B. 1750; d. 1791.

Ysaye (*e-si'-ye*), **Eugène.** Composer and violinist. Born at Liège, in 1858. His tours in Europe and America established his rank among the foremost violinists.

Zachau, F. W. (*tsah'-cow*). Composer and organist; Germany. B. 1663; d. 1717.

Zandt, Marie van. Soprano; U. S. A. B. 1861.

Zarlino, G. (*zar-lee'-no*). Composer and theorist; Italy. B. 1517; d. 1590.

Zelter (*tsel'-ter*), **Karl Friedrich** (1758-1832). Composer and writer. Born and died in Berlin. Mendelssohn's teacher.

Zerrahn, Carl. Conductor; Germany. B. 1826; d. 1910.

Zeuner, Ch. (*tsoy'-ner*). Organist; Germany. B. 1797; d. 1857.

Zimmermann (*tsim'-mer-man*), **Agnes.** Composer and pianist. Born at Cologne, in 1847. Went to England when four years old. Entered the Royal Academy of Music when nine. Twice gained the King's Scholarship, and also won the silver medal. Composer of chamber music, pianoforte pieces, songs, etc.

Zingarelli (*zing-ah-rel'-lee*), **Niccolo Antonio** (1752-1837). Composer. Born and died at Naples. Wrote many operas, church music, etc., and was famous as a teacher.

Zumsteeg, J. R. Composer and cellist; Germany. B. 1760; d. 1802.

Zundel, Johann. Composer and organist; Germany. B. 1815; d. 1882.

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